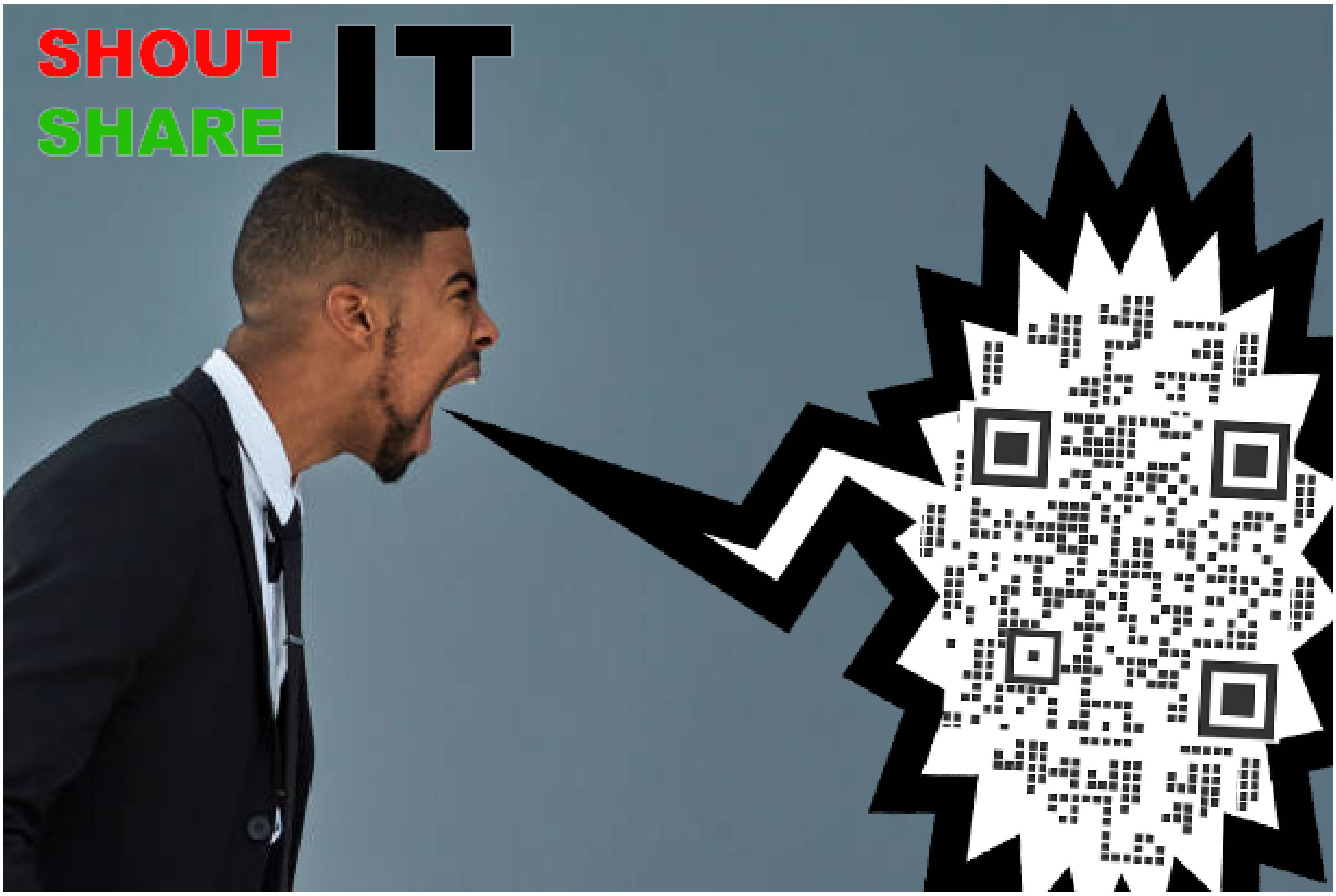
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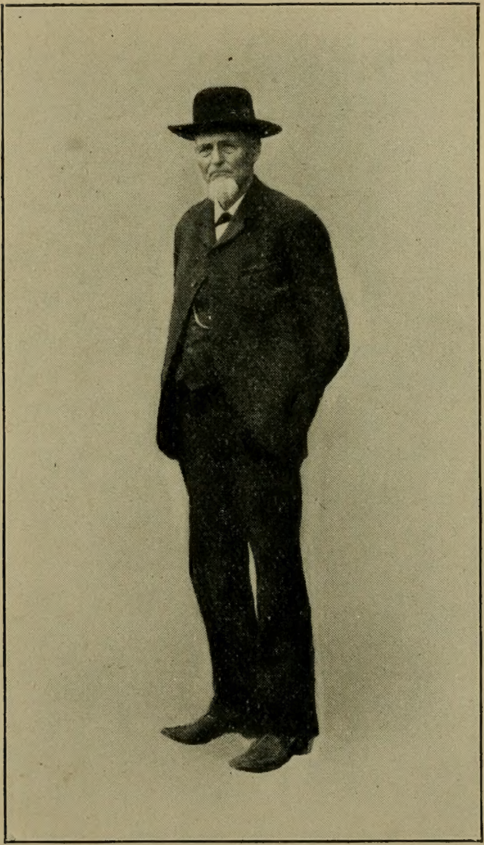

THE AUTHOR.

THE SHADOW OF A GUN

BY

H. CLAY MERRITT

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DEDICATORY.

In memory of my old friend, Vincent M. Wilcox,
Late of Madison, Conn.,

Who, on his wedding day, delivered to us these comforting words: "I am now a benedict. I shall be the father of one child, and only one, to show you all what I can do," I inscribe this volume.

As it is the first, so also shall it be the last.

Faithful to his promise.

Address, R. Webb Wilcox, New York City.

The Author.

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PREFACE.

This is not an autobiography. The woman at my elbow rose indignant at the mention of auto's. She says, "Do you know how they annoy me? They are the plague of my life. They are beggars in disguise who wait on me without solicitation. They have put me down to a certain figure and I must pay up or become friendless. Now I am going to be square with these fellows, but I will bowl them down at every opportunity. The thing is becoming chronic, and I shall demand of these inquisitors that their hands are clean and the goods are sterilized before they go into the market. Ah, yes, I prefer to distribute my own charities without being a web for every genteel fly that buzzes."

I rose to explain we were talking about auto's and not ought-to's. "Oh,' she said, "you mean automobiles, I expected it was some foolish thing you were going into. You know I could not get out when once they started to run away. I like a horse I can say 'Whoa' to and will stand stock still when he is tired out, but oh, dear, the auto's——" We settled our difficulties then and there, with the autocrats, the autographs, and finally with the autobiographs, declaring we would have none of them, so the whole story will shut up as tight as a clam on personalities which are ours *per se*. The reminiscences will be short, and if their flavor is not agreeable you will readily distinguish between them and an emanation which comes from decomposition of organized bodies, in which case we would have to preach our own funeral.

To the impartial reader it will occur, we imagine, that this history travels over ground untouched by other writers. Freezing introduced a new order of shipments and its immense benefits spread shortly from public to private uses. Frost and ice now begin to be fashionable and fire and solar heat were ostracised, and the thermometer became the dividing ground between the champions, while isothermal lines became the rule for every perishable property. The Blue Line cars came into notice about 1875, and the Star Line and others started shortly after, till now we have a net work of moving trains which distribute the goods to all parts of the country. The game business stood at the foundation of these discoveries, which eliminated the great obstacles which had so long opposed progress. We lost the birds but we gained infinitely more than we lost in the general spread of the principles of refrigeration. No amount of nursing could furnish sufficient supplies of game for the cities as they increased in number and in size, while suitable acres for the propagation of game birds constantly decreased. The universal sentiment seems to be to accept the loss as we did that of the pigeons, which was more fanciful than real. The red rag of the hunters which so long infuriated the bull which stands regnant upon the trembling dais which he has overthrown will now be done away. The victory was not worth the taking, and the remnant which was left was not worth saving.

In the description of the game birds of this County we have not thought it worth while to use other than the common nomenclature with which every school boy is familiar. The varieties are few and those only have been mentioned, the hunting of which was profitable.

The poet Horace uttered his indignation against him who first invented a ship, but without our little craft the adventures on the Little Iowa would have been impossible. Fronk, with his little punt, would not have threatened to clear the ducks out of the whole marsh of Annawan, and Hiserodt, shoving his canoe into the quill weeds, would not have exterminated a hundred ducks at one discharge. Without a boat, the Joles' might not have crossed the Green River with their loads of golden plover, or the Collins' swept the woodcock that infested the shores of the Mississippi and soared far above the grave of Dubuque. Without a boat, alas, how could Charon transport us poor mortals across the Styx into the land of the immortals.

Macauley has said somewhere that if London were to be destroyed by any calamity that the man standing on London Bridge would be able to reproduce in vision the Imperial City. Some day a despairing huntsman, finding as he will that the plough of the farmer has made the prairie, once vocal with wild birds, only a desolate solitude, will reconstruct a map of this wonderful region where the hen cackled on every plain, the quail whistled on every hill, the snipe flew along the marshes, the woodcock whistled through the grove and the ducks swarmed in thousands in every conceivable bayou, a sight grander than any temple and more ravishing to the hunter than the streams of Paradise.

It is not our purpose to glorify any hunter by a display of big bags of game. Mighty hunters are not scarce in Henry County, but they are the survivors, and the game business has passed away in a generation, not by the onslaught of the hunters, however severe, but by the onward sweep of those mechanical forces which have converted wild lands into smiling and cultivated fields. The wilderness is the home of the barbarian, and both are inimical to civilization. A few snap shots of the camera here and there will give form but cannot restore the dead. If we can set before our readers a photographic view of the changes by which, from 1857 to 1897, a period of forty years, the game has been driven from Henry County and adjoining waters, we shall be abundantly rewarded.

The third and last division of this work has received the greatest attention. The introduction of the gun into human history was one of the most powerful factors in building up the civilization of the present day. The old manner of warfare has been examined with all the minuteness that history could furnish. The Greek Fire has been set further back than the date generally given at the siege of Constantinople, 673 to 679, about four centuries, and the reasons therefor. The whole question turns when the Greek Fire became an explosive, a projectile, and later the basis of gunpowder. In the short digression on the causes which produced the "Decline and Fall" of Gibbon, we have ventured to express an opinion that Christianity did not have any appreciable share in that disaster. We prefer to agree with Dean Millman in his notes, and with Sir James McIntosh, than whom a more scholarly, conservative and judicial critic has not appeared, than to the biased judgment of any sceptic.

REMINISCENCES.

PART I.

I was born in Carmel, N. Y., in the last month of 1831. I was born with a gun. By this I do not mean that any smoke of powder or brimstone marked my advent, or that I was so heroic in appearance that some outward sign was appropriate for my proper getting on, but I think there was a taint of wildness in my ancestors, and if the saving grace of economy had not struck them, and the fear of becoming vagabonds, I have no doubt, other things being equal, they would have become hunters like myself. They were backwoodsmen once and carved their way with the axe, and passed their lives with modest comfort, thrift and industry. A gun to them was like a bird of ill omen and those that followed it were denominated lazy.

When I was five years old I was sent to board out in the Village, and my brother and myself were sent to school, which was very handy, on the banks of a pond. This pond was a mile long and half a mile wide, following the length of the Village for half its course, then dropping between high banks it drew to a point on its southwestern shore. One day a fine-looking, highly cultivated preacher came to town, and making the acquaintance of the Raymond family, they who instituted the show business, married a daughter, and not thinking a pond was hardly appropriate for such a fine sheet of water, called the villagers together and gave it the more dignified name of Gleneida. I came home to stay at the end of two years, a mile from town in the country. There were hunters all around me at that early period, bushels and barrels of game were transported to New York past our door almost every day in the Fall months, going by market wagon to Peekskill on the Hudson and thence by boat to the City. Once or twice a year my father went to the City and took my brother and myself with him, when we had tne great novelty of riding on a steamboat, the master of which was a Mr. Depew, father of the illustrious Chauncey, the after-dinner speaker. I was quite small at that time and the sights of the City were altogether too much for me. I was continually lagging behind while my father and brother were leading along the street, and finally they got a few rods ahead of me and something attracted my eye within one of the windows, observing which I turned partly around as I moved on, and there was a funeral procession coming out of the front door, and as the bier was passing I fell directly over it onto the sidewalk. My folks fell back and gathered me up until I could meet another exploit. I always carried a few shillings with me, and if I did not buy gum or candy, I threw it away for a pistol. I had a school mate who frequently discoursed on the virtues of that weapon and of his success in killing quail with one, and a quail appeared to me a valuable asset to fill out my slender purse. The first time I bought a pistol I confided the knowledge of it to my companion and we started out when snow was on the ground in the confident assurance that we were going to supply the market. We thought we would first load up the gun, and when that was done we took it up by turns and shoved it out at arm's length to show our ability to handle such a prize. When a little woodpecker, before unobserved, came climbing down a tree very near us we thought we would shorten his journey somewhat by a volley, and my companion, catching up the gun in too much haste, he pressed the trigger slightly as he lifted his arm, and firing the weapon without taking sight, the gun was discharged, sending the load within a few inches of my head. Then I took less interest in such small game and thought of getting a coat impervious to bullets if I followed the business any longer, until inquiring of my school mates I found the pistol would not kill a fly, and I believe it would not, for a fly was altogether too smart for it.

I do not know how the earlier generations of my family captured game, when the flint lock was the only kind in use, and that only a single barrel, for they certainly did market birds long before I was born, but I heard my father say that during heavy falls of snow himself and brothers used to follow into the swamps where partridges fed, and finding the holes where they plunged into the snow, would fall suddenly upon them and catch a great many underneath. The old gun, the king's arm which was set away behind the door in our home, was seldom called out then unless a hen hawk disturbed the chickens or a weasel was seen reaching out his long neck between the gaps in the stone wall. Then my father by snapping the lock a few times would generally pursuade it to go off, and nothing was left of the varmint but shoestrings. My brother whom I interested with myself at length bethought us of getting out the old gun and on the pretense of killing crows have a good time with it shooting bobolinks, whose melody we were not anxious about. We had no shot, but used in its place small white beans, but the arm was so heavy neither of us could hold it up to shoot into a tree where the birds mostly sat, so I lay down on my stomach and supported the gun on my back while he brought down some trophies in that way. One day a big owl alighted on a hump about twelve rods from a stone fence. I snapped the old king's arm some minutes before it would go off, but at last a spark fell and the owl was no more. Always we had the satisfaction of saying we had killed something when we carried the old gun, and on being pressed to declare what it was we solemnly affirmed it was the powder. This uncertain and irregular use of the weapon was more freely indulged in because we had inspected a certain back room in the house where many old relics of the past were stored. Among them we found packages and packages of powder which had been preserved unused for seasons long forgotten. Every new demand for the gun made the purchase of another quarter of a pound necessary until there were pounds of it lying about, and though much showed the effects of time, in our youthful exuberance every package was a prize, and explosions became very frequent, but all went through the king's arm and nothing higher than bobolinks fell to our booty.

Next I heard of a distant neighbor that had a gun once owned by Whitney, the crack hunter of that country, and I succeeded in some way of carrying it off with a very little money, and for a long time I concealed it in that back room where we found the powder, until my father stumbled on it one day and then there was a rumpus. I had to explain its presence there the best I could, but in the end I retained the gun. It cost something to shoot it, and for that reason I did not shoot it very much, but it became the tattle of the neighborhood that I had a gun and that it was not a *gratis res* in our family. My maternal relative across the creek said he had some grey squirrels he was planning to tame, but as soon as I got the gun they were all scattered and gone. I carried the gun with me on most occasions when I could get away down to the stream where there was a big rock projecting from the farther side and where I gathered many strings of fish. This cliff-like elevation was covered with hemlocks and the shadows fell all the way to the top of the rock, above which a zigzag path led along the hill among the evergreens. Looking a few steps before me I perceived a partridge with its wings and tail spread as if about to fly on my approach. I threw up the gun with a quick motion to the proper angle and fired. The smoke was so intense for a moment I could see nothing. My eyes were blurred and wet with excitement, but going down a few feet and groping around I found the partridge, and as we had an old-time visitor that day, it was served as a meal and eaten with a relish.

At that time in the Spring the woodcocks were playing around in the edge of the evening on and above a piece of swampland that adjoined the homestead and I often went down to see them alight and hear their s-p-a-t-e. Sometimes they would drop down from the sky almost on my head. Then they would switch off a rod or two away, to alight and repeat their ditty, then arise skyward again, but the ground was so rough I could not make them out on the dark ground. Across the creek was another refuge for woodcock, and here in the brush on the hillside they passed the hours of sunlight, and as dusk started in they would rise up, and, going to the open field near by, they would discuss the same low notes as in the swamp land. I watched at the top of the hill to see if I could catch them coming out, but I never quite succeeded. One night the bird was going through his usual billet-doux; I was trying to see him as he whirled around in the sky above me, when suddenly he dropped within a few feet, twisted to one side and landed under a moderate sized hickory tree and "spated" again. I inspected the place very closely by the sound where he sat and at last as the moon was rising I could detect something that looked like a hump of dirt. I concluded it was him and though in the shade of the tree I could not see the sights across the barrel, I fired at a venture, and going up found I had killed Mr. Woodcock.

I am partial to the cap-lock because the first I ever saw I borrowed from a neighbor, and there I learned its wonderful properties to earn your gratitude or disgust. Fifty miles north of New York City the Croton River is divided into three branches and on the middle branch most of my early life was passed. I had a fondness for that stream which nothing could shake. There I fished long and often and there I soon learned to know for miles all the deep places where the largest fish abounded, and in my delight at the loan which my neighbor gave me I hurried along until I reached one of those deep places under the bank where most of the large fish gathered and which I had often failed to take with the line and which I now proposed to shoot, a thing which I had seen done in shallow water before, and I shot. Shooting a little high, as I had learned of the refraction of shot in water, I found while I did not kill any fish, I killed the gun as effectively as a striker kills an engine. Like all amateurs, I let down my gun and raised the hammer. For what purpose I do not know, only to see the lock working, and alas it did not work. The lock was a wreck. Then I set the wonderful thing down in despair, resting it against the body of a tree for support, and

I thought. When I had thought enough and the surprise passed off, I turned to pick up my gun and lo, it was not. When I had thought a little longer I looked down and discovered it lying in the bottom of the river, whither it had gone, I suppose, because so much thinking had disarmed caution. When this gun was repaired it took all the spare change I could muster to pay for the job, but I had the gun. It had cost me something and though I was getting the worst of it I did not repine. I thought I would like to be a sportsman. It was ignoble to shoot game sitting; I thought I must try wing shooting, and this is how I began and practiced. A colony of swallows had builded their nest on my neighbor's barn, and as they were coming and going like bees at all hours, I walked in among them. After shooting one or two loads, my gun, which had an iron rod, became choked with it in loading, and I could not withdraw it. I was determined it should come out if I had to shoot it out, and as the rod rested upon a load of shot, it was trying to a gun to unload it by firing and it might try me. Turning up the muzzle at about an angle of 45 I discharged the load at a swallow, rod and all. The bird fell, I am sure of that, but of myself I was not so sure. It threw me violently around and the stock came down so sharply on my shoulder that I was a little dazed for a while, but I became composed as the pain worked off and I found the recoil had not hurt the gun, but the iron rod I could not tell whither it had disappeared, neither could I load again. The gun lay around and I did not dare return it in that shape to my neighbor. Haying was coming on. The gun was pointed in the direction of my father's farm where the haying was to take place, but as I had no means of following the rod, either in direction or distance, I never expected to see it again. While the hands were working in the hay at least fifty or sixty rods from the barn where I shot the swallows, the sharp rap of a scythe around some metallic sounding thing, surprised the mower. The thing appeared to be the rod which I had shot away and in its descent had come down point foremost through an apple tree, which ruined the scythe from point to heel and became the mystery of the whole summer. In due time I returned the gun to my neighbor and the rod. My aspirations to shoot fish were somewhat modified and my thirst for water from that time on checked, but my passion for gunning increased. I had often heard of the Gay boys and Whitney, living a few miles away, who made their living with a gun, and I was eager to follow them and learn their methods. As I was along this branch of the Croton every day, I soon saw what game they were hunting, and the sound of their guns became familiar to me, as our house was only forty rods away. I had a curiosity to make their company and in a boyish way would run down to meet them whenever I heard their guns. I did this for several times until we were quite familiar. They were good, honest, industrious men, and at noon tide they took their meals under the hemlocks on top of the hill, about ten rods away. They seemed pleased to see me, and had not that reserve which most hunters have when you make their acquaintance. Their game was woodcocks, about which they gave me bits of history, and I was delighted to see the birds and handle them. They were the first woodcocks I had ever seen, and they told me of their value, which seemed to make their work profitable. In the course of our talk they described how they had lost a bird between where we sat and the bridge, some twenty or thirty rods away. They had wounded the bird, but being still able to fly, they had not found it and at last had given it up. This was in the latter part of October when woodcocks passed Southward, generally taking their journey along the beds of streams where they ran that way. I did not see the hunters again for many days, but I had some traps set for mink along the creek and next day was inspecting them to see if I had caught anything, and just above a stone dam not far from the bridge, as I cleared the fence I saw before me in the soft bottom and within a step or two of my trap a woodcock which did not rise as I approached and I immediately concluded it must be the lost bird of my hunters, and carefully stooping down with a sudden spring I caught my bird and it was the woodcock of which I spoke, as his bloody foot and matted feathers around it plainly told me. As I lifted it up I thought it appeared of rather light weight, and I found that its body had shrunken away from not getting its usual food. I gave it to my brother, who had caught some quail in a trap, and they were all dispatched together to the city. The woodcock sold for half price on account of its poor condition.

When the next year came around I was a little farther down the stream and about the first of July when I scared up a whole brood of woodcocks, which scattered about in various directions. One bird took across the little stream and alighted on the opposite bank, a distance back and between a lot of stones, brush and debris from the river. I waded across the creek to the spot where I had accurately marked the bird alight, and on reaching the place and looking down carefully between the stones I saw the bird. Stepping back a little I again made a quick move of my hand and secured it, not quite full grown, but salable. I started home with the bird in my hand and as I raised the first hill across the stream a market wagon came along and the driver asked me what I had in my hand. I showed him and he said he would give me a shilling for it, so I exchanged properties and he went on his way.

In the fall one of the Gay boys came past where I was along the stream and he was hunting partridges. He said one had flown up ahead of him along the open, and I followed him to see it shot. It had run out beyond the copse that lay between that and the open field, but the dog soon struck its trail and raised it, and as the hunter put up his gun I took particular notice how he sighted his bird and that he followed it along with his eye over the barrel till his motion corresponded with that of the bird, and then holding a little bit ahead it was easily brought down. I bought it of him for fifteen cents and I went all the way to the house and back again to get the money.

When I was thirteen years old I had a gun and used it freely, but had no dog. In the bottom land I have mentioned where I was first attracted by the woodcocks, there were several broods raised each year and the first of July shooting began. Along this lowland inside of the woods there was a low swale which straggled off down to the ravine where it became a little rivulet emptying into the creek, which was a drain for the whole country. As I crossed the swale near its source I flushed a woodcock, which I immediately shot. The report of the gun threw up another bird and I disposed of him in the same manner. I may say here that this shot was of the easiest possible kind and that it bore no comparison to shooting older birds in thicker cover later in the season.

CHARLES KNOX.

At this time I must recall also a man in whose family I dwelt during the two years I was away from home, whither my father had placed me to be convenient to school. He was a great fisherman, as well as a great hunter, and while his house adjoined the street its barn sat partly over and adjoining the lake. Here he caught pickerel every day and sold them. He had a great eagle, which he held in a cage and which caused much talk among the small boys in the neighborhood. A few rods away on the corner of the street he had a boot and shoe shop, that is, he made boots and shoes, but did not keep them in stock. He passed his time between the two places, and as he was frequently out gunning I came to know much about his life and very much about the guns, which to me were a great wonder and as I well remember were said to be of great value.

How well I remember his pleasure at the good reports which came to him from my teachers. Our spelling books at that day had some Latin words at the bottom of the pages and whether I was taught or learned them of my own choosing I do not know, but I learned them and repeated them when I came home at the close of school as readily as I would have done in English. When we came to the multiplication table I noticed the numbers we had to learn ran only to twelve or twelve times twelve, and without asking why I proceeded to multiply up to twenty, thirty and even to a hundred, and later years could run up much higher figures, sometimes to four decimals. I was much annoyed in later years at some of these street fakirs who gave sums to be figured out by the bystanders, and no one could seem to do it so rapidly as they could do by their methods. All that I heard I could answer as fast as they asked and I would have done so only it would have negatived their theory and would have brought attention which I did not want. Very high numbers are so seldom used it does not matter about them in daily practice, but the involuntary process which often comes continuously through my waking hours is not at all desirable, and it is only by a very strong effort that I can prevent it.

When I left him to go home he followed me with smiles and many good words, as though I were his son and he were loth to part with me. I think while I was with him I drew in with my breath something of the passion which absorbed him and it is no wonder the more I emulated him he became my hero. He was just one thing always and I can think of him in no other way, and if you improved him you would be compelled to reconstruct him. As I walked the road to town every day to school he never lost sight of me or forgot to inquire about me. He was a man of large build, weighing over two hundred pounds, and I wondered often as I grew older how he could carry his sturdy frame all day long among the marshes, bogs and quagmires which the woodcocks infested and be blithe and gay when the day closed. I never saw him angry. He was not profuse in expressions of his morality and he had no high ideas of honor. He was not a cultivated man, neither his conscience nor his credit was brisk, but he would not offend you if he could avoid it. He would not argue with you long on any subject, and if you did not like him you could part with his company without any sign of displeasure. I think his vices were of the milder sort. He was once a great drinker, but had become temperate. His profanity appeared only among the lower class whom he thought would respect it. It was not gross and did not flavor his general speech and did not seem to wound his wavering conscience. When he took his usual hunt in July he used to drive past my home and often I have met him on the way to school, and when he returned he would regale me with stories of how many birds he had killed and the fine times he had had each day. I learned many lessons in woodcraft while I was under his care, and later when I went to school a good many miles away he was located at a station on a railroad when I took my departure and where I found him when I returned. When I wanted a dog he furnished it, and some of the stories which will follow will give an account of the smartness which one of them displayed in the bush. When my old host died not many years ago he was a thousand miles from me, poor, unable to take care of himself, and, so far as I know, beyond his son, he had not a mourner. That man's name was Charles Knox. Peace to his ashes!

GEORGE W. BLUNT.

When I was grown or nearly so I began to be known as an amateur hunter of some respectability in that state where game was not very abundant, and a noted watering place called Lake Mahopac, five or six miles from my home, frequently sent up sportsmen in the summer and fall and they were not as well versed in the habits of the birds and the places where they could be found as I who saw them more or less every day, and they would drive around to me with an extra gun and dog to shoot two or three hours with them, which I most willingly did, and among those who thus came was a Mr. George W. Blunt, connected with the government survey of the harbors in and around New York and vicinity. When I entered Williams College in 1850 I remembered that man, and as I sometimes killed more partridges than the family I boarded with could use I shipped a box of them to my friend, and this was the first shipping of any consequence I ever did. Before I went off to school, however, I became acquainted with the habits of most game birds that were to be found in that country. In the late summer there came upon ridgeland of my father's and also that of our neighbors a few pairs of fat plover, birds with a very melodious note which they uttered as they rose to the wing, of rather wild nature, but where the grass grew tall they were comparatively tame. I killed a number of pairs of them and saddling a horse I rode down to Lake Mahopac, the watering place before mentioned, and found a good market for them at twenty-five cents each, which the buyer paid me for in silver quarters, which pleased me very much, my father making no objection or offering me any compliment. Then as summer came on I went up to Barnes' swamp, a mile distant, where I heard the Gay boys killed a great many woodcock, and as I was the first on the ground that season, I found them quite plenty, but my anxiety to make a good bag made me nervous, and although I shot away three pounds of shot I only caught one bird. Then I hired an acquaintance in the afternoon to scare up the birds and let me shoot standing outside the bushes. In this way I scattered three pounds more of shot and only bagged one bird. By that time they had become so scattered and scared into distant covers and lay so close that I had to give up the day's hunt. The bird I killed in springing up through the bushes became momentarily entangled, when I stole a march on him and killed him before he could get away. I then discovered I was shooting too far behind.

AMENIA SEMINARY.

At the age of sixteen I went to Amenia, Dutchess County, New York, to study for college and remained there one season. This school was a Methodist institution, and several of my home acquaintances went with me. None of them were apt or industrious students and they seemed to think they were there to while away a holiday. One of our number, at least, got into the habit of fast living and was expelled. One young woman led a life of bad repute. There was one young man there also who had once lived in Carmel, where his father was a dominie, whom I found had entered when I did from some eastern county, who has since made a great mark in the world, Cyrus W. Foss, now Bishop Foss. I think there was something in his make-up which changed the whole course of my future life, because I pursued the same studies with him and could easily lead in the routine of daily duties where there was hard work to be done, but, oh my, he had a dictionary of words in his brain and such a fertility of logic and language as I never saw equalled. In debate, in argument, he could set off such a display of fireworks that I thought he had mistaken the day for Fourth of July. I only attended one of his debates and he so overcame his competitors that he left them no place to stand upon and nothing to talk about, and the case was so well argued from his standpoint that there was no need of an umpire, and there was not a baker's dozen left to hear the verdict. I was positively certain that he studied no harder nor to better purpose than I. He was like Jones; he could do anything anybody else could and pay the freight. His wealth of words and his serene and intrepid manner would not have disgraced any speaker addressing the Senate of the United States. I can only say that he frightened me out of all expectations. However, I did not expect much, as I always found a person ready to do anything better than I did. The building in which I roomed was four stories high, occupied entirely by young men. Adjoining this building on the south side was a building which met it at right angles, in which there was a belfry, and farther south there was a third building used as a dormitory for young ladies, about the size and shape of the building that I was in. One of the young ladies came from my native place and my brother for a long time flattered and flirted with her. On our side was a fellow—I think it was the man that rang the bell—who was in the habit of coming into my room, letting down the top window, climbing over it and by reaching with his hand could catch hold of the shingles on the roof above and so pull himself through the aperture. I saw that done so often that I thought it was no smartness and would like to try it. I lowered the window, stood upon the top of it and putting my hands on the roof pulled myself out. I had seen this same young fellow return often the same way as he went out; I had followed up to the peak of the roof, and after I had seen enough thought I would return to my room. I dropped my feet down outside of the shingles and began to slide along down, having no hold at last till just the space I sat upon, and as I reached further down I did not seem to hit the top of the window, and I was then sitting on the edge of the roof not over two feet wide, when failing to reach the window I started to return back up the roof. As I did so I slipped an inch or two and came within an inch of going down, when I sat perfectly still and thought a moment what to do. I could not go down and in trying to go up I would slip lower. Below me the ground was covered with smooth flat stones, and as I looked across to the windows on the south side in the ladies' department, I saw the windows full of people looking out and the ground below covered with young ladies, and among them the one that came with me from Carmel. I felt carefully around with my fingers on each side of me and by good luck struck the point of a nail which had risen sharply through the shingles and I fastened to it on one side; repeating it I had the same success on the opposite side, and between these two I partly balanced myself, as the nails were too small to hold my whole weight. I raised myself slightly as much as I thought the nails would bear and found I could gain something, a half an inch or so at a time, my feet in the meantime hanging over the roof. By continuing to hunt for nails and finding them I gradually recovered my lost ground, which I could not have done if my nerves had been the least unsteady. I got back to the top of the roof, then passing along the peak I reached the middle building where the bell ringer took me in, and as it seemed to me gave me my life again.

I entered Williams College in 1854 and remained there until graduation. For so old a settled country it was well supplied with game, that is, with partridges and woodcocks, hares and rabbits, but no quail. I never saw but one in the four years and that was on a high mountain half way to Greylock, and it was not disposed to make my acquaintance and moved off. Partridges and rabbits were the stock game and they were equally plentiful. I killed hundreds of the former, and Mrs. Sabin, with whom I boarded, had a full house on Sunday when most of them were served up. I first killed them on the ground under the bushes and I always shot at them whether they were sitting or flying. In the latter case I generally failed. Tuthill, one of my classmates, often went with me on Saturdays and sometimes on Wednesdays, and when I shot at a bird flying and missed him, he would come up and chaff me with the remark, "As usual," when I told him I had missed. However, he dropped out as the season waned and I hunted alone. Sometimes we hunted for squirrels, which were very numerous. One day late in the fall, when the leaves were mostly fallen and the birds getting rather wild, I traveled over the usual route and a partridge sprang up from the foot of a hill and circled round within gun shot of me. I followed him around with my sight, looking across the gun, then giving a quick jerk ahead I fired and he fell. I then distinctly remembered how this had been done and I never forgot it afterward, though I killed so many. I overstocked Widow Sabin and I thought I would market a box and see how they would sell. I knew of no one in New York but this Mr. Blunt and I sent him the game. He answered me in a few days, saying he liked the birds and enclosed me the value which he said Messrs. A. & E. Robbins put upon them. The price was not very much, but it put me in communication with the greatest game merchant New York had ever had or ever will have.

POST-GRADUATE HUNTING.

At Williamstown I generally hunted without a dog, but on one of my vacations home my old friend Knox, finding I wanted one, offered to show me one which he said was of fine breed, and together we went out to give him a start in the woodcock country north of the village. We did not meet with any till Knox, who was a very heavy man, began to get tired out, when he suggested I give him five dollars and take and use the dog, and I got him on the cars with me and landed at the college city. And now as graduation was past, I set out for a good time among the feathered birds in the hill country. On the road to the White Oaks across the Hoosic River I had often found partridges plenty and I followed up along the little stream that flows down from there. When about half way up on the right side there was an opening in the timber and in the soft ground I raised two woodcocks. Then I hunted a long time and could find no more in that neighborhood, and going farther up I struck some higher ground. The dog running along a little before me suddenly stopped and pointed. Nothing moving and seeing nothing, at last I ordered Jack to start him up, whatever it was. A partridge arose and I killed it, then another and another, two or three flying at a time, at every rise of which I killed at least one and marked the birds as best I could in the direction they had taken. The dog moved on; in a few moments he set again and the birds seemed to be

A REMARKABLE SCENT.

very gentle and unsuspicious. They would alight in a few rods. When I thought that I had got about all on that side of the road, I crossed to the other, where I knew one or more birds had certainly gone, how far I could not say. What I could not understand was the action of Jack, who seemed to be leading ahead all the time with his tail straight out, with his nose well raised, and apparently taking a line direct some distance ahead. As we proceeded farther and farther I was becoming dubious of his knowledge, and going twenty or thirty rods and nothing new occurring, I was half inclined to call him off and go back, but did not. He proceeded across the wood till we came in sight of a clearing, and at the corner where the fields made an angle, stood a few scattered evergreens, directly back of which the dog seemed to lead. All at once he stopped and would go no further. The ground was bare; there was no game in sight, and looking at the dog I saw his eye brighten, the pupil of his eye dilate and he threw his head partly around looking over his shoulder toward me. I came pretty near calling him an old fool. A thought struck me and I looked up in the nearest evergreen and there not twenty feet from where I stood a partridge was sitting on a dry limb close to the body of the tree, and raising my gun slowly I took off his head. The dog was satisfied. He dropped his tail into its usual position and started off for more birds. This is the only instance I have known of a dog getting a trail over the whole route that a bird has just passed. Possibly a half hour elapsed from the time the bird crossed the road and the dog took the trail. He certainly could not have taken the wind at that long distance where the bird sat in the tree.

Sometimes President Hopkins' boys went with me, and along that White Oak road as we were coming down we ran across a mink going up the middle of the stream, which we killed and the boys preserved and stuffed the skin for me. The fur has not perceptibly changed since I first got it, and the sight of it always refreshes my recollections of those days, and of the two boys, one of whom was Archie and the other Lawrence. One other brother is now president of the college.

WOODCOCKS ON HILL SIDES.

A short time after and a little above where this incident happened I had been circling round the north side of a piece of timberland late in the afternoon. The shadows were falling and it was quite cool on the north side. I struck a flock of partridges, which pushed on ahead of me toward a fine piece of bottom land, where a few scattering pines and considerable underbrush appeared. Passing down the last rise from the bottom, Jack set a woodcock on a dry side hill, but the bushes were quite close and about ten feet high, so that you were compelled to shoot within a little more than that distance. I raised one bird and then another, and in the space of three or four rods, I think, I must have found nearly a dozen. I shot two or three, but had no particular use for them, as I had no market. I had been told by the Gay boys of this particular habit of the birds in the fall when they flew south. Afterwards I found it of very material use, without which I should have many times gone home light handed. I remember this circumstance very particularly, because as I came down to the Hoosic River by the bridge I saw something coming down the river, not very far from the shore, and the thought struck me all at once that that was a fish of some kind floating on its back. I ran quickly across the bridge on the other side, in time to reach it with a stick and pull it ashore. It was a magnificent trout, the largest one I had ever seen. The weather was cold, the fish was in perfect condition and just back of its forward fins there was the marks where it had been caught by a wire and it had broken loose and got away. I took that trout to Mrs. Sabin and it furnished a breakfast for all the boarders.

Now this dog Jack was a very remarkable specimen of his kind, and while he had such a fine nose, he had other qualities which were not as agreeable. He had some day been misused, either in his first training or afterwards, and you were never quite sure in the morning whether he would make you good sport or poor throughout the day. There were certain motions the hunter might make or certain words he might carelessly use which seemed to frighten the dog, and he would lie down and all the coaxing could not get him ahead again. There were times when birds were lying all around you when he seemed to have lost the scent or the birds lost theirs, and he did not succeed in finding any. Not far from the same White Oaks on another occasion there flew up before me and across the creek at one time twenty partridges in succession. The underbrush was not thick or heavy, a few old logs lay about, over which a little thicket had grown. I set the dog to work and it seemed as though he left

PARTRIDGES HOLD SCENT.

no spot untrod. He searched out this thicket with scrupulous nicety and raised only one bird, which flew out on the opposite side so I did not get a shot at him. I hunted the adjoining timberland out for twenty or thirty rods on each side with the dog working as faithfully as he possibly could, and found nothing. On another occasion we were southwest of the city and we ran into a fine flock of birds. They did not make off or try to escape, several of them ran along before me in plain sight and Jack took the notion that something was wrong and lay down. I was considerably provoked and gave him a cuff or two, when he jumped up as if everything was settled, ran into the brush ahead of me, turned around and lay down again. He had been whipped some time evidently and had ran away till this became a passion to him and there was no remonstrance. Whipping and coaxing did him no good whatever. In my disgust I raised my gun and without hardly a thought what I was doing I gave him the load. That was the last of Jack and I felt so bad that I actually left the scene, the country and the city forever.

Some time later there came an inquiry to the village for a school teacher, from Madison, Conn., and I accepted the offer and at the beginning of December set out to fill the bill. It was not a hard berth; the people were cultivated, of an exceedingly pleasant and agreeable disposition and social almost to a fault, and we got along well till spring. Then school closed for the summer and I was out of a job. Some time during my vacation in the fall preceding, I killed partridges and woodcocks about

GO WEST, YOUNG MAN.

Carmel, and when I could get enough I sent them away to market. Our market town was then first at Croton Falls and later at Brewster Station, where the milk wagons ran every day, and where I soon found a New York man shipped a car of butter, eggs and meat once or twice each week, and in colder weather handled poultry and game. I sent down a few birds and they brought very good prices. I increased my shipments and later I saw the shipper and he said to me, "You are such a hunter, I should think you would go west to Illinois, where there is plenty of game. We have plenty of prairie chickens in November and December and the months following, and find a good market." The man had a very pleasant look, seemed honest as my neighbors, and I was quite pleased with him. I found his family had originally come from Bedford, not many miles away. I had uncles in Illinois also, who, whenever they were on a visit with us, told of the great amount of prairie chickens and quails there were in that country. I had never seen a time better to go than now. I embraced the opportunity, added to the small list of goods a dog, bird dog, of course, which I bought from Smith, the only local hunter in Madison, and he was both a good one and his dog. He had no bad habits, and three days later I was on the Illinois River at Peru, where I landed the 14th day of June, 1855, a time of year when birds are not hunted. However, with the dog I could not miss seeing game entirely, and on the banks of the Vermillion I discovered a few woodcocks. I knew of no sale for them. There was also quite a few grass plover that I saw as I went to town and back on the road to my uncle's. I patiently waited chicken time, which I was told was the first of August. After quite a stay I took the railroad to Henry, and a little later to another uncle's six miles further in the country. There I found another hunter, and in connection with him the birds we killed and the sport we had would sound like a tale that was told, which nobody would believe. Prairie chickens were everywhere on the prairie. We could scare up five or six flocks, possibly a dozen when going through one stubble field, and the flocks were large. It was no use to kill many, so we contented ourselves with a limited number, as many as the family could eat and as many as we could give away to our neighbors. We had no price for them. Our only desire was to clear up the surplus and start in with a new catch. A hundred birds a week was all that we could dispose of, when we could have killed five hundred as well. As the season became later, quails appeared in large numbers, more plentifully around the thickets and along the water courses, but plenty enough in the corn fields. There were neither buyers nor sellers at that early day. Cold weather came on, a buyer in town offered me $1.50 a dozen for chickens and seventy-five cents for quails, but his ambition was soon gratified for taking large lots, and he dropped the price to fifty cents per dozen for quail, at which price I could not kill them. I went down below Henry on the east side the latter part of October, and there the quantity of ducks to be seen passed all records. There were men there shooting for market, but the most they could get for mallards was $1.50 per dozen. What I killed we ate. I went into the bushes a mile below town, where a lake empties into the river, and there I found woodcock quite plenty and my people were well pleased with them, and I passed the time between that point and the river, sometimes killing ducks, and I actually did kill one goose, and why I could not kill more no man could tell. Hundreds of them passed over my head every day, so close I could see their eyes, which is an infallible sign that they were within reach, and the shot would rattle against their feathers like hail and never one come down, except in this one instance. Then I went back to the prairie again for a while and while I was shooting a few chickens I saw approaching across the prairie, which was then entirely bare, not a house in sight for miles, a brant.

GET MARRIED.

He came within gun shot and I unloaded on him. He did not stop but passed directly on, and I watched that bird till he was at least a half a mile in the distance, a speck in the horizon. All at once he whirled suddenly around, came back again directly towards me and this time I felled him. As we were going to town the next day we passed through a long range of timber, where were large numbers of pigeons, moving about in flocks. I fired at them to see how many I could bring down at one shot, and I gathered up nearly a basketful. As the weather got still colder, I followed along a little run at the foot of the high prairie, along where Spring Creek now runs, and found a few snipe of exactly the same kind as I had formerly killed in New York State, but there was no sale for them and I did not try to get them. Before I left Henry in the fall my uncles' folks transferred me to another brother, who lived on Chenoweth Prairie in Bureau County, and I think I was the least unpopular there than at any other of the brothers. At that time I had an attack of ague and was blowing hot and cold, and a quiet bed was the one thing needed, and my uncle was very kind to me, his patience was tireless and he furnished me a horse and sent me to Boyd's Grove, where I got a bottle of Christie's Ague Balsam, which knocked the enemy out from his encampment within me of more than thirty days. I became so much improved that when a neighbor farmer said he would just like to peel me, I said all right, I am just green enough to be peeled and now is your opportunity.

Uncle Joe was an old timer and had never seen wing shooting. I took him out with me one day to please him and he seemed to enjoy himself greatly. After that his son Dan wanted the same dose, but he wisely chose a horse and rode behind me, Sport leading ahead fierce for birds. Dan carried the sack which was to hold the game. We had not got out very far on the prairie when the dog pointed, and sure enough up went a flock of chickens. Two birds fell and they were quickly transferred to the sack and we followed around after scattered parts of the flock till we struck another and still another until we thought we had all that the family could use, and calling off the dog I went a little distance to where Dan was sitting on his horse watching our motions. As I approached him I said: "Count the birds and see how many you have got," as I thought we would not need any more. He had just five, the rest he had scattered around on the prairie, following me and not knowing he had a large hole in the bottom of the sack, which let them fall out as fast as they were put in. The grass was knee deep and it was impossible to look them up that day.

In straggling around from one place to another, I did the worst thing that ever could happen; I got married. That is, it was the worst thing for her; I might have done better; she certainly could have done no worse. I was practically an outcast; there was no one to take me in; there were plenty to throw me out, but the air was free, the sky was above me to save me in the last resource. I could teach; twice I did it with fair success, but I did not care to follow it. I could walk behind a harrow and this I did for a farmer for five long days, beginning Tuesday and ending Saturday night, when I received five dollars. Asked if I would be on again Monday morning, I replied, "Not on that kind of a nest." I went home to my mother-in-law. As we got up in the morning she said I could take a pail and go out to milk the cow. I did not milk the cow and I hope it did not hurt her. I went to town, saw a few chickens on the road, saw a fence lined with them and I began to study what I could do with them in case I got them. I went east through Bradford and on the way saw immense quantities of golden plover, passing to the northeast. The sky was spotted with them, as I had seen wild pigeons in New York State. I saw no way of turning them into cash. As a married couple, we thought we would go east and see our relatives in the spring, and on the 7th day of May, 1857, we left for New York City. The weather was unusually cold and I have never seen such a spring before or since. At that date there was no grass to feed cattle; everything that supported them had to come from the mow or the stack. The day before we left I went down on Indian Creek to kill a few snipe which I had seen there quite plenty a few days before. There was not one to be found, but there were a few grass plover in pairs about the fields and of these I killed quite a number, and added to these I put one chicken. These I put inside the trunk, where, after a passage of three days, it was no surprise that the birds I had were a little tender, but I took them out of my trunk and proceeded to sell them on the streets of the city. I got as far as Washington Market, when the buyers were so plenty and eager to buy and so thoroughly blocked my way that I was compelled to stop and put a price on them, and though the price seemed enormous, they were soon disposed of at what I asked. Not a policeman stood in the way; not a soul asked me what I was going to do with that prairie chicken. The dealer before whose stand I negotiated my trade had apparently a half bushel of small, dirty birds, water soaked and of such a hue it was hard to tell what manner of game they were, and at my inquiry what they were and what they were worth he assured me that they were English snipe; that they were worth three dollars a dozen, and that he would give me that price for all I could get that spring. It was too late for further shipments that season, but I formed in my mind what I would do with them the next year. Added to this I had found woodcocks plentifully in the woods adjoining the open lands where I found the snipe. Prairie chickens could be found everywhere in Illinois at that time. The corn fields were full of them in the fall, golden plover in countless droves flew over the fields in April and May, and with the ducks in thousands, it did not seem a bad proposition, to kill and market them if I could ship them safely to a market a thousand miles away. How this was accomplished we shall try to relate. Henry County is our starting point. It is fortunate in many respects, it is fortunate in its rivers, which, beginning with small and unimportant creeks, flow into Green River, thence into Rock, and finally into the Mississippi below Rock Island, or the waters might take another direction and flow into the Illinois. It is a productive county with rich, arable soil, sloping slowly back from the river banks, making a perfect water shed which rains cannot inundate. It is in the Military Tract which the government set off to pension the soldiers and which embraces the counties of Adams, Henry, Stark and Bureau, lying north of the Illinois River. In describing the appearance of Henry County in the early fifties, we can better designate what it was not than what it was. It was a new country and new people, and settlements were few. You could travel almost in any direction outside the limits of small towns and tracts of timber where settlements were begun without being harassed with fences. Probably more than half of the land was unoccupied. The prairie land was largely neglected. The settlers came from the East, where timber was plenty; it was a luxury here. What trees were standing were scorched and scarred where the forest fires had run through them. Their skeleton arms threw dark shadows over the highways. The highways stole softly around the hill sides or they clambered up where a ravine threatened to obstruct them, they paid no moment to section lines. Sloughs that had little or no travel in rainy weather were impassable. Sometimes they were bridged, or had been, or had a few round logs thrown across, which threatened you with a delay, if not with a bath. The woods, where they were fenced, threw up a heavy undergrowth of shoots and wiry grass and young bushes fertilized with the rains upon decaying embers. In the low grounds along the creeks and streams the cucumber vines flung great arbors which it was impossible to walk or drive through. Vines of wild grapes hung from the blackened limbs and shrouded in deep mourning the enwrapped forest. Wild plums, with their ripened color and perfume, covered the hillsides. Little streams here and there trickled down. The surplusage was held in tiny craters which did not run into the rivers or the sea. Tile and tiling were unknown. On the prairies it seemed desolation, neglected by man, a wilderness of waste land, it was roamed over by wild birds in the day time. The wolf sat and whined on the hill side or set up his sharp, short cry as evening set in. Cattle were few in the cultivated fields, on the prairies they herded or roamed in small bands. The summer heat was terribly oppressive. As Fall came on the heavens were vocal with birds heading south. In the Spring they remained until May. Thousands of pigeons in the cultivated fields and some nested in the country. Cranes stalked abroad in Spring and Fall on the open lands. Some nested here. Their call was caught up by moving flocks in the heavens as the summer days came on. The fields seemed nearer the heavens, farm houses clustered along strips of timber, the dews fell neither in few nor sparse drops. Your neighbor was distant, perhaps many miles, your crops brought low prices and transportation by wagon to market was long and arduous. The little cash you had was like the survival of the fittest, not to be measured in value by things around you. You must pay taxes, but few things you could sell. You did not want many things. Taste and fashion did not live where you dwelt. You raised your own meat, you could and did often do without it. With grated corn you made bread for your breakfast; mills were miles distant, and your travel there was necessarily infrequent. In time you fenced your acres and improved them, but you were not anxious to add to them. They were of no certain value, nor any great value. If you were sick you suffered in silence, or drove long distances for a physician to cure you or a priest to pray for you. Out in the corner of the field, on that little rising ground, the story was told, if told at all, of your family, of its members as it came and went, of the little corner reserved for someone, your wife, if remaining, and for you.

HOT WEATHER A BURDEN

With the coming of the railroads new life was infused in the County and State. The C., B. & Q. came in the southern part of the county in 1854. The Rock Island in the northern part two or three years later. Crops of wheat and corn began to be called for; farms that lately had no cash value brought good returns from the crop when corn was selling at fifty cents and wheat at one dollar fifty per bushel. Many farms paid first cost with only one crop. Little stations started here and there along the line of the railroad every few miles. All kinds of wares the farmers needed were offered for sale; the roads that traversed between towns began to be improved. Fences were built up, the lines straightened. Many farms that skirted the timber broadened out into the prairies, and increased their pasture where the land was not tillable. Labor brought good wages. Many of the comforts of life were lacking. Malaria was in the air. In the low lands sickness was almost universal, and mosquitoes a torment to man and beast. No contrivance existed that could keep them out of the house unless the doors were closed; blinds and screens were unknown. By reason of the fences you could not dodge the sloughs and go around them; many roads had no bridges at all, or they were built far away where the old roads traversed. Where the roads had been worked in the Fall and built up they were impassable in April; rains fell unceasingly; travelers went on horseback and left their vehicles mired in the roadway. Where one horse went in it took two to draw it out; flies, insects and summer heat were the portion of all. The railroads did little to foster trade; their trains were infrequent, their time little better for passengers or perishable goods than present freight trains; it took three days to reach New York. The express on perishable goods was high and often prohibitory. As a consequence, many goods perished; many goods that were consigned to distant markets were never reported by the consignees, if they received them. Losses were seldom paid and seldom recouped by new shipments. As a consequence, trade languished in all but the necessaries of life and goods in which slow time was unavoidable. There was no cold storage heard of, no refrigerators and no inquiry for them. Even ice was obtainable in summer only in towns and villages, and in limited quantities anywhere outside of large cities; the price was so high but few people except butchers supplied themselves; the means of cutting and storing it in winter were crude, and it was often hauled from long distances. Guns were few and of poor quality. The farmers and householders had only what they brought with them when as pioneers they came into the country. Rifles prevailed; muzzle shotguns were few and hardly obtainable; the whole country could not have shown a respectable wagon load. In the winter time, during snows, prairie chickens perched on the fences, or on the old, swaying, croaking oaks that had not fallen on the hillsides, and morning and evening gathered around the unpicked cornfields.

What birds were killed were perforated with rifle balls and of little value; if they were ever marketed it was in the winter and for short periods only, and then disposed of in neighboring villages or sent to Chicago. Game dogs were hardly thought of. Until 1857 there was not a bird shipped out of Henry County in warm weather farther than Chicago. With the increase of new farms, game birds increased perceptibly, the grass sprung up everywhere where forest fires were kept out, and the quail nested and were prodigal of large flocks where the springing bushes supported the tangled vines and held up the grass tops. The cornfields distant from the woods harbored the chickens as soon as the corn was high enough for shelter, and they built their nests and multiplied on the hillsides not very far away. Woodcock were plenty along the streams in summer. Snipe and plover fed along the low outlying lands in Spring and Fall in great numbers, and bred abundantly in the swamps, which were never drained. Immense flocks came and went during their passage North and South, the whole bottom land north of Annawan was one hideous squawking of ducks and geese and cranes which could be heard for miles in March and April. Moving herds and droves that made the circuit of the farms every day to feed, returned at nightfall to whiten the marsh and confuse and drown every sweet note and voice until they disappeared. Nobody seemed to think there was any market for any game anywhere except in cold weather, nobody knew how to pack in hot weather. Wing shooting was so seldom seen or practiced that a good shot was set upon as one to be watched and in general avoided. In the summer of 1858 we shipped our first box of grouse to New York, ice packed. The express was six dollars per hundred, and the box was packed so heavily with ice that, although the birds brought seventy-five cents per pair, we got but a few dollars out of it. About one-half of the birds were green and they brought only about half price. Two things we learned we must now do; we must cut down the weight of our packages by using less ice and lighter boxes, and we must draw our birds when we killed them. We kept the birds out of the reach of flies. We bought some birds when we could do it favorably to keep our stock fresh and make frequent shipments. We were the only shippers in the market, but the trade was new and weak, and in a week or two more we forwarded more birds than the market could use. We were advised to hold a few days until the market recovered. To do so we had to cut off our help. When it was gone we were ordered to send more birds, and so we seesawed one day with another, now a surplus and then a dearth, until the season passed away. We got not much cash, but we did get the experience, which was more necessary, that we could kill and market in hot weather and expect moderate margins. The limitations which had been so frequent at first we began by steady sieges to work off. When cold weather came the demand increased rapidly and we could not find game to supply it. Quail were wanted in October and November and months following, and by increasing my staff of hunters, we made many strong shipments and received very good returns. We moved over to Geneseo and was in that neighborhood hunting for several years until the defenders of the noble art became jealous of us and made such war upon us that we shifted our quarters to other parts of the county and to Kewanee, but never left the county only for short seasons afterward.

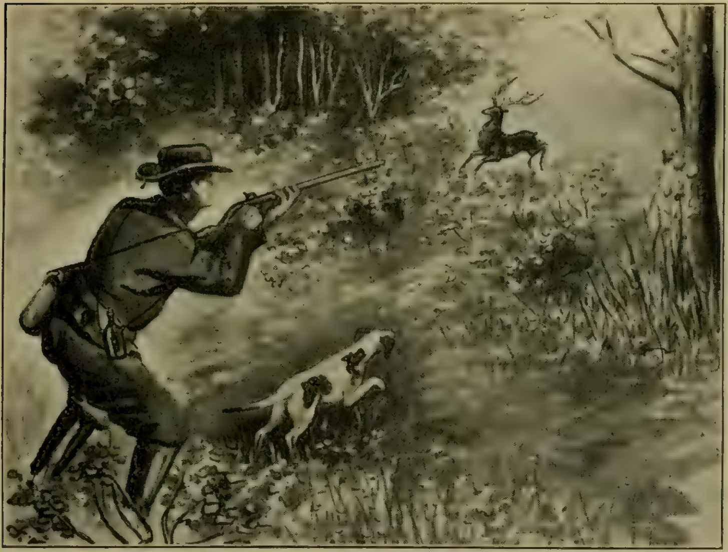
In the Spring of 1858 we traveled on foot to Annawan, the first time we ever saw that village, intending to hunt English snipe if we could find them, as they were wanted in New York. There were only two men hunting there at that time beside us, and they were entirely engaged in killing ducks and geese. I endeavored to find out from them if there were any jacksnipe around there, or if they had ever seen any, and they could not even tell me what a jack snipe was. Snipes there were in plenty, they said, but when I came to pin them down they turned out mostly to be sand snipe of very little value, and finally they declared they would not spend their time killing such little birds if there were any. Pointing in the direction of the marsh, they said, "Look over there," where the ducks and geese were flying in thousands, "That is the kind of game we are hunting, and that is worth something." It was now about the first of April, no snipe as yet appearing; and I accompanied the two hunters for a few days waiting for snipe to come, and we killed ducks and geese in abundance, but there was little sale for them and that was soon supplied, and the only returns we could get was to strip the birds for their feathers. In two hours' shooting in one afternoon I loaded a horse with all he could carry and rode to Kewanee and sold the birds there.

We usually shot late in the afternoon, and camping out over night on one of the small islands, took in the morning flight and then returned to town till the afternoon again. We established our camp fire where our hunt ended, hung up our trophies on the adjoining trees, and turned in under cover of a few blankets. Some time in the night I began to feel uncomfortably warm on waking up, when I discovered my coat was on fire, and rushing up I called out to Bice and Porter, the two hunters, to "put me out," "put me out," which they proceeded to do in the most primitive and unstinted fashion. In his last days Bice never forgot to mention that occurrence whenever I met him and to inquire if I had been put out any more afterwards. Until the 15th of April very few snipe appeared. What few came were of poor flesh, and as I had not yet got used to shooting with my left hand and could not discharge the gun with my right hand, which had been crippled, they did not suffer much from me. When a bird flew to the right I could shoot as well as ever, but to the left it was much more difficult. On the morning of April 16th there was quite a fall of snow; in the course of the forenoon it warmed up rapidly, little streams of water formed and ran along the highway and emptied into the gutters until they were full and overflowing, and the open space around the depot was soft and muddy. A little to the northeast some sags formed in the surface the water ran into and formed little ponds several rods around them, and further on into Latham's, as it then was, the ponds were larger and the mud was heavier and deeper, so that we did not go there for a day or two. On that first day in the village of Annawan, within the limits of Railroad Square, we saw and summoned to surrender more jack snipe than we had before seen alive in all our life. Any good shot of this day would have killed one hundred birds easily where we barely killed forty. In a few days George Mowcroft associated himself with us and we took southwest from Annawan around the edge of Mud Creek and the low lands adjoining. We found snipe very plenty and golden plover were flying in large flocks across our track every few minutes where you could kill from three to six birds at a shot, and no unusual thing to bring down ten or twelve. We had not learned the philosophy of using a team and wagon, and if we had we should have found it too expensive, and we let flesh and muscle bear the strain. George was an unusually good hunter. He never wanted to ship and I had to buy his birds. He followed with me for two or three years in the winter season, sometimes in Knox County, sometimes elsewhere, but he was always on hand in the Spring till prices fell so low in two or three years that he abandoned the game business altogether. If he had waited for the reaction he could have done a fine thing for himself, but he finally became discouraged and went to Nebraska, where I lost sight of him, and where, I learned, he afterwards died. No weather was too cold or too hot for him if there was a bird to be shot or a mink to be caught, and so he had funds enough to cover his expenses he cared for nothing further. When he went away I was owing him quite a sum, which still remains in my hands subject to the rightful claimant. However, we continued to kill with little help till the first week in May, when the weather became very warm and the birds left us during one night. Our last shipments were damaged somewhat by heat, as we did not use ice and did not know how to use it, but Messrs. Robbins informed us we should break it up, mix it with sawdust and lay it on the birds, which we afterwards did. At that time all our sound snipe sold from 18 to 21 cents each, and golden plover at something less, about 12 to 15 cents.

In the summer I associated myself for a while with George Cutmore, who was said to be a good shot and had the best dog in Kewanee. I think the latter statement was true, as I used one of his pups afterwards, which I named Sancho, of blessed memory. With a Mr. Dorr, who furnished horse and wagon, we went west three or four miles and on the side of a hill in a wheat field we found a flock of chickens late in the afternoon. Dorr was a few rods away and the first bird that rose between Cutmore and myself was killed instantly. The moment it dropped Cutmore rushed for it and shouted, "I killed that," without waiting for anyone else to claim it, put it in his bag and proceeded to load. He dumped in his load of powder in a great hurry, and, raising the hammer to renew the cap, he was surprised to find his gun had not gone off, and he had two loads in his gun instead of one. This created a great laugh and he took out the chicken and threw it over to me. In the rush he made to get the bird he frightened up the remainder of the flock and we only secured two or three of them. We did not take Cutmore with us any more, and Dorr and myself hunted by ourselves. We could not find any outlet for our birds at home, although we offered them at one dollar per dozen. In Chicago some sold at two dollars, but if we had any old birds among them we could not get over a dollar or a dollar and a half. About this time, in August, pigeons began coming into the wheat fields five miles away from here, and Mr. Elliott, of the city, frequently asked to accompany me. We went out on the Frye place and in one afternoon we killed in the neighborhood of two hundred. Mr. Elliott took all he wanted and I shipped twelve dozen to Chicago, but never could get any track of what became of them. Altogether, the trade was not flattering, and Mr. Dorr soon gave it up. After that Charles Taylor and Clint Higgins brought in birds and I began packing for New York. In the first shipment of which we have reported of prairie chickens we had a few quail which brought twenty cents each, and these being light to ship left us a good margin when we bought at one dollar per dozen. We decided to try Geneseo, and in October, with five or six men, we went there. We killed along Green River hundreds of quails and they brought us about fifteen cents each. My first check from A. & E. Robbins was over eighty dollars, and I presented the same to Mr. Squires, the landlord of the Howard House, as the present Geneseo House was then called, for our board, and it frightened him. Board was then only three dollars per week and it did not count up very fast. We stayed there ten or twelve days and so many men came in and wanted to hunt I let our home crew return and trusted to this new contingent to supply its place. I also hired William Bowen to furnish team and hunt with me, which he did for over a year. In that time we had shipped from Geneseo over five tons of game and were getting a little start when the disturbance came on, as before related. In that time we had become acquainted with every hunter of note in that country, and my going back to Kewanee and later opening up at Atkinson was no disaster to the trade. From Atkinson I received all the birds north that was killed, and I operated there until New Years and bought much poultry. Everything prospered reasonably well. In the Spring heavy lots of snipe and plover would come in and I packed them promptly on ice, then placed them close in single boxes without ice, and they went through in safety to New York. Sometimes we met the Joles' at the Green River Bridge, and once, when that bridge was washed away, they ferried their game over to us in skiffs. I carried in my buggy a full supply of ammunition and sold it to them to be paid for in birds. After a while I had some trouble with some outsiders that did not pay up and I changed my plan. Instead of paying for the birds and afterwards selling out the goods on trust, I inquired of each man what ammunition he wanted, laid it aside for him, counted out his birds, took pay for the ammunition and cashed the balance. Mr. Joles would say, "Merritt is getting sharp, he does not believe in paying for game and trusting out the goods at the same time."

After 1863 I did not go into Knox County again, but hunted through the winter, sometimes at Colona and sometimes in Iowa, but the hunters continued to meet me and bring in wagon loads of birds whenever they could reach me. In this way I received several thousand quails that were brought by Joles and Beers to Kewanee. After spring shooting was over we hunted woodcocks on Green and Rock River, commencing about June 15th and lasting till July 1st. After that time we went up the Mississippi, after 1861, and hunted there till October. Some of the time we went into Iowa for chickens after 1869, but always was home again in Atkinson for the fall trade. From 1865 to 1870 the chicken shooting was good around Atkinson at first, and later on the Edwards River, and I found it much more profitable to hunt them than snipe or quail in the fall, except in cloudy weather. About 1870 I went to Atkinson in October, as usual, and south of the Grove to my usual haunts, and I came home terribly discouraged. I found very few chickens along Mud Creek and west of there, where I had before found them plenty, and the market price was not improved, so I decided I could do better business only to buy and not to hunt regularly. Then for two or three years, till the summer of 1873, I hunted fitfully, bought more poultry, had to employ help in packing, and met and corresponded with hunters wherever I could find them, and started a nice trade west of the Mississippi. about 1880, to compensate my loss here and supply my increased customers. This is the outline for fifteen years, which the following pages will endeavor to fill out.

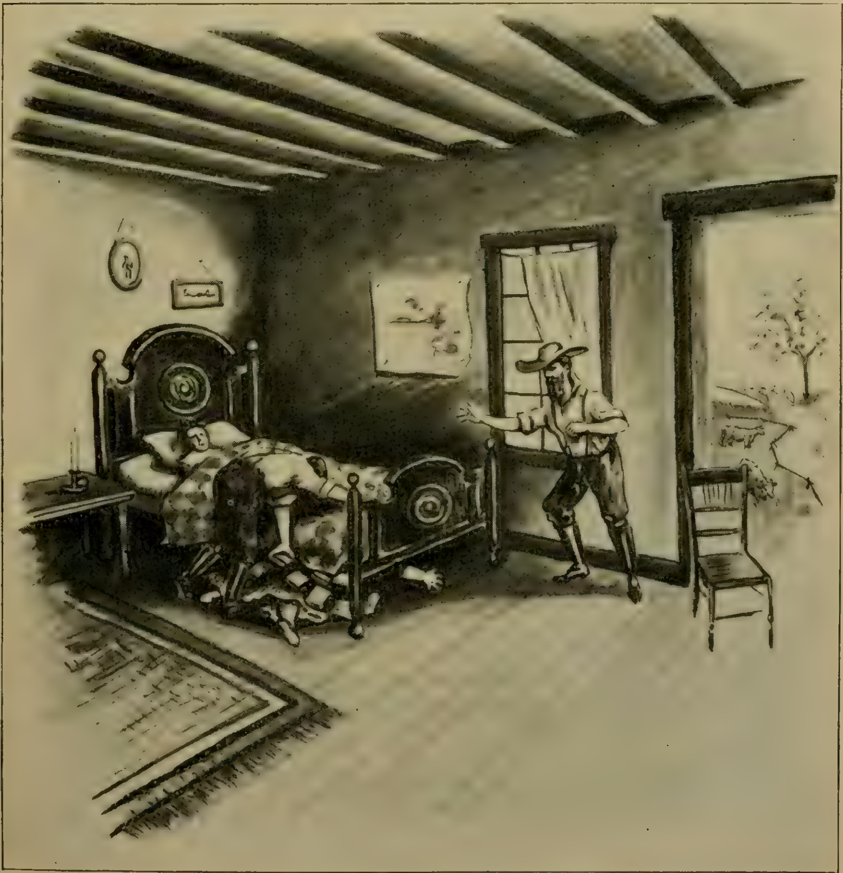
In 1859 I was at Geneseo, as related, and went to New York with a small carload of game. On coming out of the city I met, at Jersey City, a man of middle age who told me he was coming west to Henry County, to Colona, and I rode with him to Chicago. He said he had bought some property in Colona and was going to build a hotel there. In the previous fall I became acquainted with a hunter by the name of Bacon, about five or six miles northwest of Geneseo, who told me that quails were very plenty between his place and Colona, and I went down there in the early spring when the ice was breaking up and boarded with Mr. Sharp, who kept the hotel, and shot quails through all that hilly country, sometimes with two or three hands beside me. When I was alone I tramped five or six miles or more up in the hills that adjoined Green River and sometimes camped out, made my fire and slept by it, and returned next day with two loads of quails on my back. It was most too cold to camp out with no cover, and I soon found a place where they would keep me over night close by, so I stayed there. When I camped out I could hear the deer snorting around at night in the timber and the next time I came that way, after lodging over night, I went out in the direction of where I had previously heard the deer snorting. This was the first day of April, 1860, and it froze hard and was very cold that night. As my dog was running along through the brush on the side of a little sag in the woods, he suddenly pointed. I walked up expecting to find a flock of quails, when suddenly a deer sprang up from the cover, ran around the side of the hill so as to give me a square shot. I sighted behind his fore shoulder and blazed away at him. I never could tell how it happened but it seemed to break a leg. The shot were very small and the deer carried that leg as in a sling, and I immediately fired the other barrel as he proceeded. I was rather dazed at the occurrence which had so suddenly happened, but followed out into the woods in the direction which the deer had taken and in the course of twenty rods found him lying dead. I could not carry him but managed to pull him up into a tree where the wolves could not reach him and went back to Colona. I described the place so accurately that Mr. Sharp was able to



Kills a Deer with Quail Shot.

bring him in next day in his wagon. I brought in fifty or sixty quails each trip. When returning I depended entirely upon my dog, as I was so heavily loaded that when he found a flock I would throw down my load till I had killed what I could and then press on again. In returning I ran through a flock of pigeons that were lighting on the trees, and they were not wild, considering that the limbs were bare of leaves and I added a large number of them. They brought eighteen cents each, about the same as the quails. In a few days snipe began to appear and, putting them together, I made out a small box and shipped them to A. & E. Robbins, and they sold for twenty cents each. They did not come in plenty enough and I moved up to Geneseo. Later we shot quite a good many woodcock on Green River northwest of the city after spring shooting was over and early in July. In August the birds were getting scarce there and I took a new man by the name of Samuel Cramer and we went over on Dutch Bottom, five or six miles north of Geneseo, to hunt chickens. We found a place to stop at the foot of the hills on your left as you descend into the valley of Rock River. I do not now remember the name of the family but we will care it Moore. The man was a hardy but slender looking pioneer and his wife was always ailing with some kind of disease, or else it was imaginary, and the man was frequently called in from his work to assist her in getting the meals. He never manifested any impatience at her frequent calls and she was very tender towards him, always calling him "Hubby" or "Hubby, dear." The wife's sister-in-law lived but a short distance away and was often called for when anything unusual occurred, or when any very sick spell happened, which

Mrs. Moore was liable to get. When we came in at evening Mrs. Moore was in bed and she was groaning and carrying on awfully, and the husband was kept running constantly after one thing or another as the wife suggested, till he was nearly tired out. "Now, my dear," she says, "my bed will have to be changed and you know you can't do it alone. Run over to John's and see if you



Trapping Big Game.

can't get Antionette to help you." Cramer was near as Moore came out and he volunteered to go as Robert said he did not dare to leave. Cramer returned shortly and the two women proceeded to put the sick woman in order, while Cramer and Moore stood near ready to help if wanted. Mrs. Moore was lifted on the lounge while the bed was renovated and after many directions of "Now, Robert," "Robbie, dear," she was replaced as carefully as possible on the bed again. She did not seem to rest just right and Antoinette, who was standing at the foot, thought she would crawl under and see if she could not adjust the slats so as to raise the foot a little, and in so doing, she threw the weight all on one side. The slats broke down and the bottom of the bed caught her square on the back and held her down. Mrs. Moore was lying with her eyes closed. She felt the weight fall off from her feet, and while Cramer rushed to relieve Antoinette, Mrs. Moore sang out, "There, stop now, leave me where I am, I am perfectly easy." Antoinette was a big, stout woman, and it was sometime before we could get her out of the trap, and the sick woman could be made to understand how it was before she would consent to have her released.

We lived well at Moore's, had plenty of milk, biscuits and spring chickens, and we killed game fairly well. The most trouble we experienced was the large size of the flocks, which were not very numerous but would all rise at once, and the ground being entirely level, the birds would settle out of sight over some big corn field where it was difficult to find them. At last we hit upon the plan of one of us watching in the morning beyond the corn fields and when the birds rose out of the stubble, the other was able to watch them where they alighted and both of us would join in the hunt. Many times we nearly obliterated whole flocks. West of us half a mile or so was Penny's Slough and a large corn field lay east of it against the woods that crowned the hill, and there we found a good many woodcock fed and by coursing through the corn, taking four or five rows at a time, we killed a good many. As I was walking along the edge of the timber I came to some cord wood piled up, and on top of it sat a wild turkey which raised up over the trees when I was within twenty feet of it, and again right across the river, as a turkey was running along several rods before me I did not notice that it was wild until it started to fly, when it settled across the river opposite to me, and very many tracks of a bear were seen as well as turkeys at Kempster's, where also one large bear was killed. This shows the wild nature of the country at that early period.

COL. E. S. BOND.

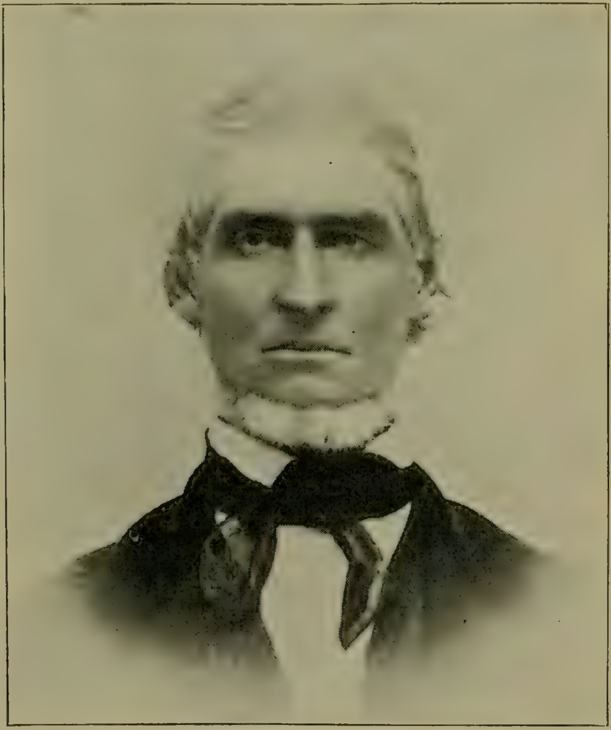
While hunting in the neighborhood of Cambridge several years later I used frequently to hear of Col. E. S. Bond as the greatest sportsman there, but I never met him till about the time of the great fire in Chicago. After the fire he was for some time just across the bridge, west of the river, doing a small commission business and handling some game, more especially partridges, and they were usually drawn. After he had removed back to South Water St., I met him often whenever I went to Chicago. He was a very pleasant man and gave me much information in my line and his business increased largely in game till he bought and sold probably more than any other dealer in the city. He did not have any freezing facilities, for none existed in Chicago at that time. I had found that Chicago was a great entrepot for game, and by keeping in correspondence with him, I was always informed what price I could pay the hunters at home. I sent him some game to sell, but the better class of birds I reserved for New York. We had not learned how to pack birds well enough in warm weather that we followed it in the summer before 1861. When the Fall came hunters appeared as usual and brought in large quantities of birds to Geneseo. As the stock increased, prices declined. We had a great many mallards and when they would not bring me fifty cents per pair in New York by express, or more than that, we had to stop shipping. When prices got at their lowest point and the weather got cold I went to packing quails and chickens in boxes and freezing them. I could buy chickens for ten cents each and quails for six, and when I had accumulated about fifty boxes and barrels I went with them by freight to New York. When I got there Messrs. Robbins seemed to have all the trade in my line. They wanted, however, they said, only quail, and for these they were willing to pay two dollars per dozen. They also offered me thirty cents per pair for the chickens, which was as good as I could get from commission men, and I turned the whole shipment over to the first named party, to whom I paid no commission. I remained in the city but two or three days, but before I left the price of chickens or grouse, as they were called, advanced to sixty-two and a half cents. My whole profit was in the quail. I spent over a month getting this shipment together and the speculator had then taken them at his own price. I studied over this a long while to see if I could not hereafter avoid this corner, and eventually succeeded, and I believe this firm paid me well for so doing. I hurried back to Geneseo, and through a friend of mine, we gathered up a good many more birds, on which we realized the advanced price without paying any more for them. I went to Iowa, took a few hunters with me, and in the course of a month, gathered up a small carload of chickens and quails, mostly the former, paying one dollar per dozen for them, and freighted them as far as Chicago. I could get them no farther, unless the freight was prepaid or guaranteed, and I finally expressed them the rest of the way to New York, and by that means lost all my contemplated profit.

In the Spring of 1859 we left the country around Annawan and Colona and commenced shooting snipe on the Big Slough, northeast of the city. Prices were good until about the middle of April and snipe were plenty. We killed frequently sixty or seventy birds a day each. Several hunters from the city joined us, our shipments were frequent, and from two dollars a dozen at the beginning, the market suddenly fell to ten cents each, and later to five cents each, at which price several fine boxes were sold in New York for us by commission men. This did not cover first cost, and in our despair over the prospect we called to mind the knowledge we had gained from Mr. Blunt, and leaving the commission men, we went to the firm of A. & E. Robbins, of Fulton Market. It was nearing the last of the season and, to our surprise, we got prompt sales at one dollar per dozen. In a day or two they advanced to $1.20, then to $1.50, and lastly to $2.00, at which price several considerable shipments went in. We reopened trade with Annawan and many birds came from that quarter. The birds were very fat and the inquiry so great we struck out anew on the Big Slough and went farther up this time to the neighborhood of Deacon Kemis' at the last point of timber on the right as you go north, near which was an old crossing. In later years I found William Morris camped here with all his strange and unsightly belongings. Within twenty rods of his camp our wagon load of hunters and loafers proceeded to do business, one and all. Some of them, not knowing anything about wing shooting, and in that part of a day we saw more snipe than we had ever seen before or since. The different members of the party spread out on either side of the Slough, so that probably we covered a space north and south of a mile. The guns went off at frequent intervals, so that it sounded like the ticking of a clock, and as the sun was getting low we brought in our birds and found that we had over six hundred. A few years later the same company would have killed a thousand in that time.

PRICES DECLINE TO SIXTY CENTS IN NEW YORK.

It was now near the first of May and I did not know the prices birds were bringing, or we should have continued at work, but we left that immediate country and with a partner went down to Henry on the Illinois River, where I had before been. We walked out from the town in the early morning down the river one mile, and then out into the bottoms south of the Big Lake. We found a great many birds but they were mostly among the flags where with water and mud the walking was very heavy. Then we went to drier land that skirted around the edge of the farm on our right-hand side; we found our load rather heavy, so, selecting a good place, we deposited our birds, each by himself, on a little rise of ground, probably twenty-five or thirty rods from the field, where a man was ploughing, covered them over nicely with grass and proceeded on till it was time to turn back. On coming to the place of our deposit, my partner found his birds were all gone while mine were left, the only instance I ever knew of birds being captured when so planted. In two or three days we got a nice box or two. We returned to Geneseo where we first found the prices our birds were bringing. Messrs. Robbins sent us two dollars a dozen for them all to the end of the season, and we regained the loss which we sustained in former sales through commission men.

About this time, while we were coursing along the lower end of the Big Slough, and near the end of the season for snipe, we saw a tall man approaching from the northeast, making his way down the center of the marsh and shooting as he approached. As he came near he informed me who he was, where he lived, up the Slough two or three miles, and that he and his boys were good shots and, whenever they could, made their living by hunting, and suggested that I buy his birds. I had seen him in the edge of the winter the year before, had been in his house for a few minutes, but was not personally acquainted with him. I agreed to do as he asked, and that man's name was Nelson Joles, who, if he did not kill so many birds himself, was instrumental in bringing me more game than any party in Henry County. One of his sons had married the daughter of George Beers, and they were all capital fellows, and for fifteen or twenty years continued to bring in more birds than I received from any other party. Mr. Joles at that time was past the prime of life but straight as an arrow, and his family, whom I had the pleasure of visiting very many times afterward, was of a very sociable disposition. The boys were all desperately fond of hunting as soon as they could carry a gun, and they made the country ring for miles around, so much so, they soon forgot their little farm when birds could be had and prosecuted this new branch of industry with ardor and success. Of Mrs. Joles it may be said, she was a pattern housekeeper, if anything too free for herself, but she assisted very much in the game business. The



Man of Six Feet.

family were living in a region full of game birds, all kinds that roamed the prairies passed over their fields, which made up a small farm adjoining wooded lands on the east and west, from which a road ran off southeasterly toward Green River bridge and on to Atkinson, and on the southwest the main road passed to Geneseo. I think Mrs. Joles must have forgotten her meals if not her sleep sometimes, because many were the flocks of geese and ducks and chickens that came from the prairie below, and making for the Big Slough were stopped

The "Gamey" Woman.

by the guns of her boys whom she duly informed when they were about to approach. I have slept many times in the chamber of her house when she was up by daylight, giving an account of what she had seen outside while she was preparing her meals. The quantities of ducks she picked and dressed were beyond all computation, so much so she had saved whole covers of down with which she graced and warmed our beds, and which will never be forgotten. Some years later she and her husband, the tall cypress of the swamps and the stalwart among men, moved to Kansas, and, returning later, Mr. Joles died at Geneseo in 1886, and Mrs. Joles, now eighty-seven years old, is ending her days in the same city, living with her son Henry. Many warriors had lived before Agamemnon, many women have shown the grace and sweetness that filled all their lives while they had happy surroundings and every comfort was assured, but she of her limited resources made health and cheer to spring up all around her and so consecrated her home. I never saw Mr. Joles after his return from the West. He was much troubled with asthma, but his humor was always abundant and charitable. His mind was unclouded and like a stream at his time of life when the fever is spent and the passions are chilled, escaping from the tumult of the hills and reaching the plain, with only ripples on its surface, goes willingly on to the ocean. When God made man I think he intended him to be about six feet tall, and this is what Nelson Joles was. In the latter part of the 70's I had an order for live prairie chickens and they were very hard to get. However, I counseled with the Joles' and they said if a good snow came on their buckwheat patch, the birds would surely come and they would get them. They got their traps ready, and sure enough the snow came and the birds. This was in March. I agreed with them for four dollars a dozen. Dead birds were worth about three dollars. I did not know what live birds would bring nor how many I could sell if I had them, but they usually brought about two dollars per pair. Neither myself nor the buyer expected very many, and as it was getting late and the prospect less every day, the buyer told my commission man to write to me and tell me that he would rather give three dollars a pair than to fail in getting them, not stipulating any exact number. I had hardly read this letter and another following immediately in which the seller said, "I hear you have a good snow out West and shall expect the birds," when lo, in the forenoon in came a wagon load of live birds to Kewanee. I think there was about twelve dozen and the boys said dozens of them got away out of the shanty they had to hold them. I put them into low coops so they would not mar or bruise each other and got them off by express next day. The expressman was not used to live birds at that time and he sent them through as dead weight. When the buyer saw them, he declined to pay over $2.75 per pair, as there were so many more than he had expected, and they were sold at that price. I sent several lots from other parties afterward and was not able to get over two dollars per pair, and it was very difficult to get them through alive. Mr. Joles was not able to do very much with game after this, as his boys grew up and shifted for themselves, but the trade in the West was opening up briskly and I commenced to get most of my supplies from there. One day as I was about leaving his place, Mr. Joles said to me: "What will you take for your buggy and give me time to pay for it, and accept a note well secured therefor?" I replied at once, "I paid one hundred dollars for this. It has not been used very long. I could sell it to you for that money." He said, "I will accept the offer, will give you the note; my boys will sign it and we will put in the little balance that is now coming to you." The first time after this that I saw Mr. Joles, I exchanged the wagon for the note. I was surprised to find it read for twenty-five dollars more than he owed me, and I said, "You do not owe me that amount." "Well," he replied, "I wanted to borrow twenty-five dollars and that was included." I told him I was not loaning money, but I did not want to give up the note, and so I let it go until I could see the other signers. We ran across one another several times afterwards and I was asked each time for the twenty-five dollars. At last I said to Mr. Joles, "I have endorsed twenty-five dollars on the note so it is now all right." When it became due Henry Joles, his son, paid me.

The winter of 1859 and '60 I passed in Knox County hunting for quail. I found them exceedingly plenty and in the first thirty days I was there I averaged fifty-five birds per day. I stopped with Mr. Norton, of the Wataga House, and drove out each day five or six miles south and southeast till I came into the coal lands. The country was very rough and broken, small streams ran here and there and gathering together in a larger channel made their way south and southwest. Little farms here and there dotted the hill sides with many vacant acres between. The farmers are mostly Swedes, very few of their farms being over forty acres. The highways did not show much signs of travel, in a little rough weather and storms you could scarcely make your way from house to house. The little pinched corn fields scarcely showed five acres in a patch, and the corn being mostly picked it was no great worry to find the birds. By the close of the winter I had nearly gathered up the quails that were in that settlement, and in March, with a couple of hunters, we moved north to the prairie country, about a mile north of Oneida. We stopped with a family where there were three persons, father, mother and daughter, the latter about sixteen years old. I remember this, for the daughter did the milking and chores about the house, inside and out, and at every proper occasion she sang "Sweet hour of prayer, sweet hour of prayer," which at that time was quite new to me and sounded both sweet and dear. At that time the fastidious criticisms of the last verse had not appeared and the passage of "Passing through the air" seemed well enough, but in later times it has been killed by seeming to use the language of the Spiritualists, who are so cognizant of that mode of traveling that it has become a menace to good sense and some kind of excision seems to be necessary. We offer a substitute:

SWEET HOUR OF PRAYER.

"And shout and sing as home we fare,
Farewell, farewell, sweet hour of prayer."

The last day of March, 1860, I left this family, and the following afternoon, April 1st, again appeared on the Big Slough. This time I left the Village of Geneseo and went north and east, farther up where the hunters lived. There was a man by the name of Crittenden whom I found in Knox County who wanted to join us in the Spring, and he was there with a horse and buggy when I came. We had three or four Joles' boys, Billy Morris, sometimes Beers and his son and son-in-law took a hand for a day or two, beside myself. Before I bought very many, I shipped a small box to see how prices would open up in New York, and it was only $1.50 per dozen. Taking the expense out the prospect was not flattering or auspicious. I should not at this time have made any contracts, and if I did, only for short periods, but the hunters were very pressing for a price, and taking the last year for a cue I rather believed that if prices were low for a while they would recover, so that Robbins would take them at a price that would make me some profit. I named seventy-five cents per dozen, and while I did not make an agreement for the future, I continued to take them and figure them at that price whether I paid for them or not, and therefore, legally, there was no escape. The next box sold for ten cents, the third for eight, the fourth for six cents each, and I stopped shipping and put the birds away in an ice house, laying their breasts flat on the ice and covering them up where nothing would hurt them. After keeping them a week, the reports came in so bad that I did not feel to risk them any longer. I packed them all up and sent them to Messrs. Robbins, from whom I heard nothing for a number of days. There was over a thousand snipe and considerable plover in the lot. At last I received answer with a check for a little over thirty dollars, with the information added that that amount paid for all he had sold, and the balance had been thrown away.

While I was at Colona a local hunter informed me there was a large kind of snipe which the farmers called bull snipe which were quite plenty above and below the Rock River bridge. I concluded they must be woodcock, and I figured that I might recoup myself with them in August following. I had long meditated a visit to my brother in Minnesota, and I thought this was my opportunity. I had lost in this transaction with Spring birds something over one hundred dollars, which would have been much greater had not some unforeseen luck fell in my way. After the prices went down to almost nothing there were a good many blue-winged teal on the same ground as we hunted snipe. As far as I could I drew the boys away from the snipe shooting to hunting them, and in the last week or so we had very good success. I sent the birds to Chicago and they sold by the dozen for $2.25 to $2.50, and as we bought them for a dollar they made us a good margin.

In the afternoon before I left for Minnesota occurred the great cyclone which destroyed many buildings in Henry County and largely wiped out the towns of Albany and Camanche on the Mississippi. I was standing at a window on the west side of the Howard House, now the Geneseo House, when a sudden gust of wind tore out the shutters, ripping the slats as though they had been paper, but otherwise doing the house no damage. It threw down the steeple of the church north of the track. It was about the first of June. When I got to Colona the bridge was gone, for the most part. We made connection with the west shore by use of boat and passengers and goods were reloaded on the farther side. One of my hunters met me at Moline and desired a settlement with me. I told him it was impossible at that time as all the birds had been lost, but encouraged him by saying, as I had no business in the summer, I was going for a visit and to cut down expenses, but would be in Geneseo again in the Fall. I paid eight dollars for my fare and board to St. Paul and had a good visit and caught many large fish in Lake St. Croix. When I went up, almost the whole length of the river was traversed by flocks of wild pigeons. Most of them flew along the bank parallel to the shore, and at the place where I got off I stopped a few minutes and in that time killed all the birds I could carry. I took them to St. Paul but could only get three or four cents each for them, and I had serious notion of shipping them to New York, but the express being six dollars per hundred I gave that up as they would bring only a dollar a dozen there. In the last week in July I returned, got off the boat at Cordova, walked across the country to Rock River, crossed that on the ferry and the next day started to my home, two and a half miles southeast of Kewanee. I had two dollars remaining and was within a mile of home on Sunday, when, as I crossed the highway, taking the fields, I had the fortune to meet John Whiffen and he was delighted to see me. He had a small meat bill, he said, against me. He said it was about two dollars. I took that sum out, gave it to him and passed on my way. Of course, I reached home without a dollar or a cent. However, I managed to return to Geneseo, where, on the first day of August, I began at woodcock on Green River. I hunted through that month, walking out and back to the river, and bought very few birds. On the first day of September I had one hundred dollars to my credit, without losing a bird or selling a pair less than seventy-five cents, and I easily killed twenty to twenty-five birds per day. The walking was hard and, in addition, I did all the packing. I settled up all my debts, with experience that was worth a decade of hard labor. These were the first woodcock ever shipped out of Henry County, and probably out of the state.

From 1861, for two years following, jack snipe sold low, seldom over $1.00 to $1.50, until late in the season, when the hunting was about over; then they would spring up to $2.00 and sometimes $2.50. Here was a point to be gained. Could I keep those birds long enough on ice to secure the larger price? That I endeavored to do. I had practiced long enough keeping birds in that manner to know how long it would be safe to do so and have them marketable. I shipped everything up to April 20th, when snipe began to be fat, and packed away what came in afterward till close to the 10th of May. The poor birds which came early would not keep so well as those which were fatter and came later, and as soon as receipts fell off in New York, prices would begin to rise, and from about the first of May till the last were sold out, our kept birds sold for the best of the season. By limiting the shipments after the 20th of the month, the marketmen would get very hungry for them. They could not get any only at advanced prices from my commission man, when they would commence correspondence with me.

In 1863 I did not buy many birds till prices were low and the amount was so large and the hunters demanded ten cents a piece for them, that I dropped out largely from buying on that account. I had an unfortunate circumstance occur which threw me out of a large commission. The ice box which I used stood on the porch. This box had once been a receptacle for beer kegs and in the place where the spout came out the flies went in, and so damaged the shipment that a hundred dozen sold for half price. At this time I was dealing with John A. Lyon, and he soon became expert in the trade and knew when to order and what they would have to pay. He did not deluge me with advice, as many dealers did, but he would, on the first inquiry, find my price and act accordingly. The two years that followed I sent most of my birds to him, because, while Messrs. Robbins would give me a little better price early in the season, they would not give me any advance corresponding with the market later. Still, I occasionally sent a shipment or two to them to keep in touch with their prices.

The market tone was now broadening and brighter, speculators began to come into the field. We reached the point where we would not sell any birds below $2.25, while the early birds would only bring $1.50. We constantly kept from two to five barrels on the ice, of selected birds, as soon as they came in after the 20th, and if orders did not come to me direct, in the first week of May we shipped them all to Mr. Lyon and he sold them all at $2.25 to $2.50 per dozen. We did this the more willingly because on another occasion we had five barrels ahead and we had an outside order for them that they could probably get from $1.75 to $2.00 per dozen, subject to sale, and as these were composed largely of early birds we sent them on. The commission firm telegraphed on arrival that they had sold one barrel at $1.75 and were holding the remainder. In a day or two they wrote me that they had sold the balance at $1.00, as they had no means of keeping them and they would soon spoil. Then I abandoned shipping anything in large quantities unless the price was agreed upon beforehand.

SNIPE AND PLOVER ADVANCE. ATKINSON.

In 1864 I opened up the Spring trade at Atkinson and put up a building there to pack goods.

They had to be double-boxed and ice-packed. The former were more desirable, but there was more risk. I remember one week's receipts of sales of Atkinson shipments which amounted to over five hundred dollars. In 1864 trade had improved so much there appeared other dealers in New York who were soliciting shipments, and among the rest the members of the firm of Trimm & Sumner, on Washington Market, of whom Edward Sumner was the active manager of the game department. He was an inveterate writer and a great penman and he started by writing up the game business from day to day and endeavoring to secure our birds. Between the two New York markets, Washington and Fulton Street, there sprang up a great rivalry, and it would be a modest statement to say that between the two we got better returns than ever before. Sumner was every way as prompt as A. & E. Robbins and the information he threw in gratis was very gratifying. Everything now pointed to an early close of the war. Money in the great centers was abundant and rapidly distributed by government. When Sumner first addressed me at Atkinson he quoted prices for jacks at $2.25 per dozen without commission. Messrs. Robbins were paying me eighteen cents each. I immediately shipped Sumner something over eight hundred snipe and received promptly in return one hundred and forty-four dollars. Following that I shipped him a box nearly every day, and as it was getting late in the month and receipts began to slacken he increased his price to twenty cents and eventually to twenty-five, and the last shipment of fifty-nine dozen that Spring to four dollars, including golden plover, grass plover and large yellowlegs. That was the high water mark and I had no birds to hold. Between 1864 and 1870 trade was unusually good, but we never reached that price for snipe and plover again within that time. One spring the birds were very late in coming and up to the 20th of April we had only collected a few hundred as it was very cold and backward. About that time they began to arrive freely, when a sudden fall of snow came on and with the increased cold shut them off altogether, and that year prices were firm at three dollars and three-fifty when the season closed. One year we shipped twelve thousand golden plover and eight thousand snipe and marketed all of them safely, with the result that prices fell from opening to close, and the last sold at seventy-five cents in New York. I distinctly remember this last, as I shot the birds myself on the Pritchard land on the flat bottoms near to Green River and east of One Hundred Acre Grove, and it was on the 15th day of May, something I had never known to be done before or since at that day. I also shipped Lanning & Laing the following year all of my birds. They were a commission firm which sold all but the second shipment and the last at two dollars per dozen. The last lots which I held a few days on ice sold for $2.75, and the second shipment at $1.50. In the following year we held back our birds, after April 20th, when they were fat, and brought them to Kewanee to ship, and by so doing we exposed them too much to the air and without ice packing; we suffered a total loss of two hundred dozen birds. They would have brought two dollars a dozen if properly packed. By this time the golden plover began to decrease in numbers and spring receipts being so much lighter, they increased in price until they brought the same as snipe. This was in the days when breech loaders began to appear. They were very high in price but poor in quality; most of them were of the pin fire kind, and the locking was not able to bear up the strain very long, which was dangerous, while the smoke escaped from around a pin, which fired the load and gave the gun the name pin fire. Late in April, the birds which now had become spotted-breasted, would hover and light in great flocks in shallow ponds where they could wade leg deep and flutter their wings and wash themselves. I detected one morning a flock of these birds sailing around and whistling over a low pond, as they do preparatory to alighting, and in a few minutes they did alight. They were very wary when in flocks, so I drove my horse quartering as if to go by them, got out my cartridges, and, when within proper distance, I dropped off behind the wagon with cartridges on the seat, stopped the horse, stooped down as low as I could to get a raking fire, and let go one barrel as they were and one as they raised. Those that fell back wounded uttered a terrific cry, lifted their wings and fluttered, which brought the flock back, when I unloaded two barrels again. They whirled away and returned until I had fired twelve or fourteen times, when they left entirely, and the birds counted out sixty-seven before one was picked up. In that forenoon I filled a two-bushel bag and was back before dinner. On the farm a little west of Atkinson I killed forty of them at one discharge of the two barrels and I think at least a dozen ran away. I used to tell the owner of the field that the birds that crossed his farm in one day were worth more than his whole farm, which was literally true. With a breech loader such as we have now a man with a team could have shot easily two hundreds birds a day.

After '63 the game business was getting brisk and purchases were so large, so often and so continuous, we were often pressed for money to meet them, where we depended for sales of goods that went a thousand miles away to market. In not a few instances we abandoned the purchase of a large amount of game solely for want of ready cash, which presented to us a very large margin of profit. At that time J. L. Platt was running the only bank in Kewanee, where now is Zang's butcher shop. I did considerable business with him, but I said to him one day that I was too far away from my place of sales to do the business which was legally mine. He asked me what I meant. I said I meant cash, and rather than borrow it or ask for accommodation I would let sales go by. He said, "Why don't you draw?" I replied I did not know what that meant. He says, "I will tell you. Make your shipments, large or small, and then make a draft against it for about two-thirds of what the goods are actually worth, and I will advance the money for you to use, charging you only brokerage of twenty cents on a hundred dollars." I took his advice and gladly, and from that time afterward I had no trouble to pay for all the salable goods I chose to handle. This was the time I was opening up trade with Trimm and Sumner, and I think there never was a draft refused, although once or twice the consignee had hard work to pay them promptly, the goods not having yet arrived. At this time I bought everything that came to hand, game, furs and poultry, sometimes hides, and the struggle on the street for poultry at that time would make a record for anybody. Best of all, my consignees were well pleased, and no upbraiding letters came from them to mar our good fortune.

In 1865, with the close of the Civil War, the cereals reached high figures and outran proportionately the price of game. Corn advanced to one dollar per bushel and oats to forty cents and upwards. Lead soared and shot brought $5.55 per sack. The price of land was drawn upwards with the crops.

During the War many pieces of land had been allowed to run fallow, weeds choked the highways and low grounds, once cultivated, went back to coarse grasses and neglect. The highways forgot to follow section lines, a short cut to the towns prevailed. The sloughs that emptied into the river beds seemed to be obstructed and heavy rains forced the floods back into fertile fields. Fences had gone to decay and the osage hedge to neglect and business was cramped and constrained because of the war. Now this was all changed. Farmers began to throw up new fences and improve the old ones. Discharged soldiers came in and made new laborers to cultivate the fields. Houses guiltless of paint were refreshened and decked anew. Lands that were sodden and cold were turned up to the sun and their faces became joyous with the harvest. Most all the waterways were shut into healthy limits, new bridges spanned the quagmire, new roads followed section lines. Hills were cut down and hollows filled up. Drainage was begun. The axe struck into the forest. On the lowlands cattle seemed to multiply; they tramped down and destroyed the thrifty shoots, the long grass and the immature bushes which promised thrifty trees and furnished the only cover for game. The Green and Rock River country began to be depleted of woodcock and quail. The waters sank low in the marshes. Ducks were fewer and their stay less prolonged. St. Peters was a land of sullen, slimy channels where the muskrat drove his canal through flags and bunch grass, from pool to pool, tearing up roots and shoots and setting up his throne on top of gathered heaps and bogs which obstructed his way. The whole country north of the C. & R. I. Railroad seemed to rise in benediction for the blessing of the sun and the rain. From the middle of June until after July 4th, we gathered what woodcocks were to be had on our home streams and then followed the Mississippi until September.

The history of woodcock shooting is to me the most interesting of all the hunting I have to relate. It began with us in the West, as stated, in 1860. I ceased following the river in 1873. At that time we had an experience that stood us in good stead for packing and marketing all kinds of game, and although we could not hold and cool off on ice in hot summer weather, as with the snipe in the spring, and then ship without ice, still the bulk was so small that the task was not onerous. We doubled our boxes always, and that was a great protection against the ice melting on the inside. Our customers were not then critical about fine plumage. Most of our birds arrived wet when sent to market and the customers did not complain, if they were sound. In some cases Messrs. Robbins informed us that the birds arrived very tender; that they picked them out of the sawdust and threw them into ice water, by which means they were so restored as to be about as good as ever. Later years we had hundreds of them arrive that would have been absolutely worthless if they had not been immediately doused in ice water. When taking them out and adding a thorough fanning, loosening up and shaking the feathers and drying them again, they regained their original appearance so they could hardly be distinguished from those that were fresh killed.

In 1861 W. K. Porter and myself started out to kill woodcock. We read of some reports in the New York Tribune that experiments in Indiana of shipping them to New York had turned out disastrously. Nevertheless, with the experience of 1860 with spring birds, we decided to follow it through the summer. We started in north of Geneseo and followed Green River down, and we were much surprised in finding birds so plenty. We continued for several weeks on that river, and the shooting was fine.

At Rock River bridge we tarried a week or more, and when once we had cleaned out a patch pretty closely we moved away a few days, and then, like young Oliver, we came back for more. The second and third time we covered the ground with equally good or better results. Then we followed up Rock River and by August 1st we had reached as far as Erie. Ice was hard to get. Added to this was the fact that facilities for immediate shipping were not to be had there. We had to carry our birds to Morrison, and when we boxed and transferred them across the country they were liable to have the ice melt out of them, and before they reached New York would be spoiled. We lost one small box that way at Erie. We packed in double boxes, lined with sawdust, and that was often very hard to get. At shipping points it could always be had, because the trains at that time used wood fires, and wood was corded up and sawed at the stations, as was the case at Colona, Geneseo and Kewanee. The sawdust was mostly oak, and the ice water dripping through it made the birds look of a dirty red color, but customers did not complain. The three things, shoe boxes, sawdust and the birds, made a nice shipment.

At length Porter thought the business was unprofitable, and dropped out. He had a crippled hand, like myself, or rather he had no hand on his left arm, and in shooting he shot to the left while I shot to the right, which made us very suitable companions. He was a straight, square man, and our business dealings together were altogether pleasant. I often thought of him afterward when prices advanced and birds were plenty, how much he was losing by the change. As long as he remained in Annawan he was active at his trade and made a good living, but he did not very much prosper. I bought some birds of him afterwards, but he took no active interest in the business, and later he moved to Nebraska, since which time I have lost track of him.

The dark cloud continued to loom disastrously over us for another year, and then the end began to dawn. We found only some sporting men that came in for a day or two at Rock River Bridge at Colona. On this trip we killed over one thousand birds and delivered nearly all of them safely in New York, but the prices were only thirty cents per pair at the highest. More sold at twenty-five and some at twenty. I remember the Fourth of July that my partner left for a home visit and I hunted alone. That day I killed three dozen birds, only getting twenty cents per pair for them. At the place where I killed these birds on the side of a slough, covered with bushes on one side, half a mile above Colona on the Green River, I saw the first young jack snipe that I ever saw, and they were so young they could barely fly and the fine hairs stuck out on their heads just like young woodcock, which we called wooly heads. After Porter returned we took a trip up the Mississippi and hunted at Savannah for ten days. These were the first birds ever taken there to be shipped and they were not plenty. Very few people knew that such a bird was there. There was no railroad there at that time and we had to take them to Fulton to ship. The habits of the birds of Savannah were different from any I had before seen and they were the same the year following. The birds were to be found in the white alders wherever there were any. The bodies of the trees grew close together, from eight to ten feet in height over your head, and frequently there were three or four birds in a clump at one time. The shade was thicker under these trees and covered the ground entirely where the birds sat. We found very few birds under the open trees and it was past the season for them to feed on the sloughs, except sometimes after a rain they could be found there. In later years we found them in August and September, largely in short clumps of bushes resembling alders in appearance, and the cover was much thicker than under the alders, and here the shooting was perfect as long as I knew it. I became so familiar with certain grounds of this kind that I had them marked in my mind, and I never failed to find birds there at any time until snow flew. In 1861 I became acquainted with some hunters by the name of Barton. There were three of them and their father, also, with whom I had only one transaction that I can remember, as he was a fisher and trapper, but he was gathering fur along the Edwards River, and as I passed his house every few days he invited me to buy his furs, which I consented to do, although I was not expert in that line. This was, I think, in 1863. He wanted twenty-five cents each for his muskrats. The rest I do not know what they were or what I paid him, but he loaded down my wagon with them at that price. I did not know a kit from an old rat and I paid him the same price for all. I shipped them as the price was fast rising, and they sold in New York for 47½ cents each, except the kits, which did not bring over one quarter that sum. I also bought a few mink from my hunters, and Jerry Hopkins at that time was keeping grocery store in the old corner of Second and Main streets, Kewanee, and as he offered to buy what I had every week and give me four dollars apiece for all prime mink (which cost me three dollars) which I would bring him, I accepted his offer. One day I brought in a mink skin which he declared was a fox mink and not worth much more than a cotton tail, and he would not buy it. As I shipped birds every Monday morning, I put that fox mink in with the birds, and on getting my returns I found it brought six dollars. I think Jerry will never forget that circumstance and he solemnly declared that that sale must have been a mistake, as that skin could never have brought that price.

In the summer of 1862 William Barton, one of the brothers above mentioned, wanted to hunt with me and sell me his birds. As I had a horse and buggy I went with him to New Boston and we remained there four weeks. The birds were badly scattered and we only killed six hundred in that time, one hundred of which I killed in three days at the mouth of the Edwards, while Barton took a visit home. The prices were very low—twenty-five to thirty cents per pair in New York—but everything else was low—board and ammunition and horse feed—but we got home whole. After a little while I pushed on to Rock River alone in the month of September, and there I killed one hundred pairs a week, and there was the first money I had made in woodcock since I left Geneseo. I killed thirty dozen in that time in about ten days and they brought me forty cents a pair in New York, and the labor was light and pleasant.

In 1863 I took the same Barton boys and one or two others in June and hunted in the neighborhood of Rock Island Bridge west of Colona, and there we killed three or four boxes in less than a week, and these all brought us fifty cents a pair. Then we followed up the river again to Erie, and there in less than a week we killed four hundred pair, which brought us as much or more than the Colona birds. I never went back there with anybody to hunt with me, but I made that point once every June for a number of years until the birds became too thin to pay me and local hunters began to come in as the railroad now passed that point. I don't think I ever went there in June but what I killed at least one day fifty birds north of the Ferry. The last time I found a good many birds south of the Ferry. The brush was thick and after pounding away to little purpose one afternoon, I concluded to quit and give them another trial next day, which I did, and then I cleaned out the whole gang. Before twelve o'clock I had bagged forty birds, and I know I killed birds without looking over the gun at all. Once the gun was discharged while I was holding it in my hand before I got it to my eye, and breaking into the trick brush, lo, I found the bird lying dead. This hunt is memorable because in the midst of the brush I stumbled over a famous steel trap, powerful enough to hold a tiger, with double springs, which I still possess. From Erie we went to Savannah and spent a large part of the summer hunting on the Island across the river and on the bottoms below the town, and in August, when we left, we thought we had killed about all the birds that were there. The Bartons were not successful in finding woodcock although the birds were plenty. They strolled constantly all over the island looking for sloughs to locate the birds upon when they had left that ground in June, and now were to be found on the high ridges under big trees and in thick, heavy clumps, and everywhere where the deep shade protected them. I had no difficulty in bagging twenty to twenty-five birds a day and never went half a mile from where I started, while they wandered aimlessly, went all around where the birds were without discovery, wasting their time where they were not, tired out at night with only two or three birds apiece and discouraged. I think prices had now reached 65 cents per pair. The railroad had come in and we did not have to transport them to Fulton. Ice was plenty and express moderate and most of the birds I shipped to John A. Lyon, New York, the third man of the trio, of whom I will speak hereafter. I let the Bartons go and took on A. Collins, who I employed on various occasions afterwards and of whom I shall speak more later. We had but one dog, and, like the lion with one pup, it was a good one, and contrary to expectation we found more birds than we did in July and August. We hunted twenty days on the island opposite Savannah and mainland beyond the cut-off, which rising at the upper end of the island, follows it the whole length and empties in the River at Sabula. We planted our birds in the damp soil along the river bank, a dozen or more at a time as we got them, covered them up with moist, soft ground underlaid with leaves, and at night gathered them together when they were well cooled off and ready to go into the ice house. We hunted here twenty days and we killed forty birds a day and marketed them in good order. I think some of them sold for seventy-five cents. Collins carried an army canteen slung over his shoulder, from which we drew long drafts each of us, as the days were hot and the water seemed as refreshing as that from the old oaken bucket which hung in the well. We walked slowly, the dog leading the way, and I do not think ten minutes elapsed in which he did not set a bird, the whole day long, but the cover sometimes was very close and many birds we had to raise three or four times to get sight of, and when we did our shots rang out together when one load would have been amply sufficient. Doubtless either of us would have killed twenty-five birds daily if we had had separate dogs.

In 1864 I was hunting on this same island opposite Savannah in July. It was a muggy, moist day and the mosquitoes were very annoying. It was difficult to keep your patience with the winged pests and it took much time to load and I got along slowly. I was on the first bench back from the River. A skiff had come up and landed on the shore a few rods distant, and I noticed two persons follow back into the woods which were rather dark, somewhat in the direction of me, and though they did not come up they seemed to be following me. They followed me about for perhaps an hour (in which I killed several birds), and left without coming up. Later, in Savannah, I was accosted by a man who said he lived there, was a fisherman in summer and pork packer in winter, was handy with a gun, and he was one of the men on the Island who had been following me about, wondering what I was doing and seeing how I killed birds. He believed if I would buy his birds he could kill them as I did, and said that his name was Nate Tompkins. I agreed with him on the price and he proved to be one of the most successful woodcock hunters I ever knew. I traveled with him until 1866, going with him in his skiff, he doing the rowing, being an expert boatman and thoroughly familiar along the river bottom in the country. Many times I sat with him in the boat as he rowed ten or fifteen miles up the river in a heavy current, always dodging the swift water when he could, following the sloughs and the shore where the water was less rapid.

HIS IDIOSYNCRASIES.

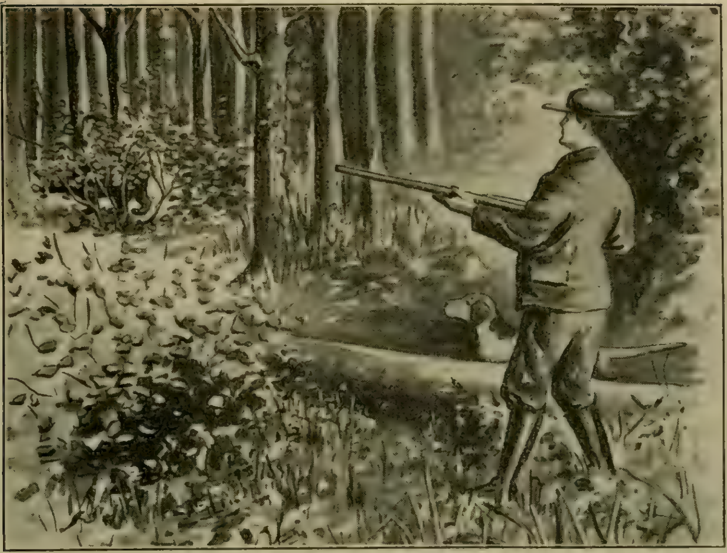
He was a most intense listener, about forty-five years old. He gathered up and held in reserve every word you said, and with his deep, dark eyes looking down upon you from those steady lids, he was a true representative of the Pennsylvania backwoodsman, as he had once been. He was an inveterate smoker and carried a pipe and smoked it as he rode, I sitting in the back seat and he pulling long stretches of the river channel, coming to a stop when he reached his limit, and always where the birds were. If he was within reaching distance of home the same day he would time his hunt so we would set out before sundown, and he absolutely declared he would not return home after dark. On one occasion I did not reach the boat until dark, and he was in a state so excited it was useless to try to reason with him. As I had struck a fine lot of birds that day and killed three dozen, I imagine that circumstance had something to do with it whilst he was waiting, gaining nothing. With all the rest, he was a good hater; he remembered distinctly every man who had taken advantage of him, even to a cent, and I took good care that he did not direct his malice towards me. He seldom killed after the first year less than twenty-five birds a day, and when he had the latter number he wanted to return home if it was only in the middle of the afternoon. He was not a temperate man, but I do not remember when he showed effects of drink so much as to be offensive or to be incapable of a successful hunt, but he was cross-tempered sometimes and he did not look out for his family as he should. Some mornings he would not appear at the boat and in that case I would go off on foot on some of the islands from Sabula to hunt, and I was told afterwards he was drinking. He had no settled town or home. In successsive years I knew his stopping place for fifty miles and I kept track of him the last when he camped one fall near Prairie du Chien. He lived until 1899 and died in August of that year. His drinking habits increased with his age, which, with resulting poverty, drove his wife at last to leave him. When I stopped with them, as I did several nights in the course of those years, his table was very scanty, but his wife made no complaint. He had a dog with only one eye, and as he had great success with him, I bought him for twenty-five dollars, hoping good luck would follow me, but some neighbors poisoned him in a few days. In 1864 Tompkins still lived at Sabula and I bought his birds at twenty-five cents each, with the agreement that he should take me in his skiff with him whenever he went to hunt. By the middle of August we had taken sixteen hundred birds. The first box brought me 85 cents, and after that all of them one dollar per pair. Later it became necessary to move, and Tompkins not caring to leave town at that time, I went on boat to Dubuque and up on to the Islands above there about four or five miles on the Wisconsin side, and the hunting was fine as he had told me it would be. The first week I killed in five days 159 birds and the following week I sent for Charles Collins to help me, and we did nearly as well for each of us, and I remember Sumner, in New York, sold them and allowed me $1.12½ per pair, so the check was considerably over one hundred dollars. I had occasion to remember this, because I came into Dubuque with the birds and the Julien House wanted to buy them, but they would only offer me $4 per dozen and I was sure I could do better. I knew a man by the name of Curtis, who was a shipper of coal and produce on the boats that ran down to Rock Island, and I thought I could borrow enough of him to buy our provisions with and get back on the Islands without waiting for returns. We only wanted $5, but he would not help me. Next day he shipped and went with this cargo, and at Port Byron the boiler of the boat exploded and he was killed. I think this was the only time I ever failed of getting accommodations on the River whenever I asked for it. I went up to a pawn shop, put up my watch for the $5, and went back to hunt.

One day we were on a rather high bench on the mainland and our guns were going off pretty lively. We were not over two hundred yards apart, but we were so busy we did not run onto each other's line. I made desperate poor shooting and the ground was good. Finally I said to myself, "I will go and see what Collins is doing," and I found him swearing fearfully at the birds which got away from him. I said, "Charley, let us sit down a little while and eat our dinner and give our nerves a rest, and we will do better." This we did, and on resuming our firing we had splendid success. There were some fishermen camping at the foot of the first islands above Dubuque, from Lancaster, Wisconsin, and we begged the privilege of staying with them in their tent at night, for it was beginning to get cool in September, and we cooked our meals and ate with them. We had a nice bed of fir boughs and I think I never slept more easily or thoroughly. We had a box of ice, a shoe box in which we laid our birds to keep them from the heat and flies of the day time. The ice we had hauled from Dubuque in a skiff and it was no pleasant or easy task. This night as we returned from hunt, we found our box open and inside a dressed pig stretched warm and fresh the length of the box, to cool on our ice and the ice half gone. There was a scene when we came together and I never want to repeat it. We had to go to town next day for ice and so lost the day. The following season I went up early and shot around Sabula and later in September Charles Collins wanted to go with me again to Dubuque. I set a day to leave Kewanee and when the time arrived he said he could not go for a few hours, "But you go on and I will meet you at Rock Island." I went there but he did not come. I returned on the first train for I knew his promises were empty wind, and his excuses were on tap whenever he wanted them. I determined to take none this time and give him no chance to form one. I came onto him unexpectedly where he was plowing, with no thought of seeing me, and before he had fairly looked up I had him. He could not look up; he broke down and begged pardon. I took him with me the next day. We did most of our hunting below Cassville, and the last week, which was the first week in October, we stopped at Spechts, opposite the Canal which comes into the River below Potosi and connects the slough with the river. In these six days we averaged over sixty woodcock per day between us, and we shipped them from

East Dubuque to New York as we came down the River, the last week of the season. The birds were sold at fifty cents per pair to Sumner, who claimed they came tool ate and out of season. In 1865 things were fairly booming. The first of the season we had a fair supply of woodcock and they sold well. In August there was no rain and the sloughs began to dry up fast, and the birds gradually to disappear. They could not be found as usual in the heavy timber under the largest trees, where the ground was soft and damp and cool. We thought we should see them again in September before their annual dispersion to the South, but they never came. For more than a hundred miles we drove along the River and surveyed with great minuteness all the places where they were likely to be found. Along some sloughs there were some signs that they had fed there over night, but we could not raise over one or two birds a day. We carried a box of ice along with us and in the course of our travel from Platte River South below East Dubuque we found nothing but partridges and did not hunt them only as the dog broke into covies along our route, and we stopped and fired a few shots. Twenty partridges we took that day without leaving the wagon road, and we sold them in New York for one dollar per pair. In our travels we learned of a hunter who watched a pond at dusk and killed a dozen woodcock or more every night, but we found no such place. It is possible that around Potosi birds could have been found, as on a later year we found them there when they had disappeared elsewhere. It is not quite certain that the dry weather drove them off. Once before it had been very dry, the River was so low that it had been forded in some places, sand banks were everywhere and water shallow. Under the great oaks, in deep and impenetrable shade and gloom, behind fallen trunks where the sun never shone, and death was disrobing the giants of the past, we had often found them fluttering up where no life seemed to exist, but we searched for them now all in vain. We had imagined the white grubs which lie hid in these sepulchral homes of rotting trunks furnished them food when the earth worms did not, but if so they left no trace. We sought them along high and dry ridges where the birds generally repair when they leave the sloughs in July, in clumps of impenetrable bushes and under thick running vines and everywhere we could invent a place they could sit concealed. The eye of the sun must not light upon them. If they were inaccessible by day they were equally so when the shadows began to fall. The quick, sharp whir of their wings would then come if at all. At this hour they left their cover for their evening meal, lighted on soft, damp ground where the worms were, did their lively probing until the ground was pierced with holes like a skimmer, or they lifted themselves up to the hilltops on easy wings, swinging as an athlete from point to point, those airy domes of rock where the clouds rolled and the lowly wanderers were lost in space. I had lost Tompkins for a while, and he was indebted to me twenty dollars or more, and he had promised to make it up to me in the previous fall, but it never came. He had sent his birds to me the year before and we would pack them with what others we had at Dubuque and send his returns to him at Sabula. I instructed the express agent there to pay him for any shipments he might make while I was away, and to the check which I last sent him, he added an equal amount from the agent, so that he got his pay twice. I not only lost the money but lost the birds, as he did not ship me again afterwards. I determined on a ruse. In July before the season opened, I went to him in Sabula and told him that I wanted his birds the coming summer; that I made no account of what he owed me, we would call that account square, he might send me in his game as usual and nothing would be held back. It worked all right. I could have recouped myself many times if I had chosen, but I never did. I got his game ever afterwards when I was within reach and I have no doubt but what it was a profitable venture.

We were apprehensive in 1866 whether the birds would be found as plenty as in 1864, but when it came around the birds were as plenty as ever. We took on Tyler Mapes and traveled farther up the River and reached Cassville, an old looking German town, and I think the hunt at that place was as good and the sport as exciting as any place we ever visited. One thing was remarkable. We were hunting woodcock and yet we were killing partridges nearly as plenty; something in the old style which we first discovered above Dubuque, was apparent. When we had a point the dog could not tell us what kind of bird it was, which made the hunt more exciting. In the thickest bushes among willows rising over your head so close set you could hardly make your way between them, you sometimes had to be dog and hunter before you could dislodge them. It was a pleasure for us to have a change, if only occasionally, and those fine fellows with tail feathers just budding out and spotted breasts, set off handsomely the ruddy brown woodcock which were our daily hunt. Just below Cassville is a small island called Jacko, and across the River and up from the old town are large bottoms where the birds had not been disturbed. We could find only one place suitable to board, which was the Dewey Hotel, the ex-governor's of Wisconsin, which he built to secure the court house and failed, and which was now in decay. It was a noble mansion and rented for a boarding house. Both the governor and his wife frequently sat at the table with us and their little child. More often the wife and child came alone, and we got on good terms with her right away, but the governor would not be comforted and one day he told us he did not want us to be killing those birds of his and shipping them to the nabobs of New York to feast upon. We inquired and found he owned about all the land around there on the river bottoms, but in as much as the landlord was getting some revenue out of us, which he was supposed largely to share, we gave ourselves no uneasiness and continued to transgress. We expected trouble, but it never came, and in time we left in peace. The governor was improving his lands up along the River with fine stone fences for miles adjoining the mountain side, and built him a palace costing twenty thousand dollars. His wife's mother lived below the town on the Wisconsin River, and as her daughter and the governor did not get along well together, it so worried her that she drowned herself in that river. Later after we were gone, I think the next spring, the wife went to Europe and drew so heavily on him for expenses, which annoyed him; she finally came home and they separated, the wife living in poverty near Milwaukee with her mind demented, and later moved to Washington, D. C., where she remained with her daughter and where she died a few years ago. The Governor became a hankrupt and his property passed to his creditors, and he died earlier. We may here remark of the two Collinses that they were brothers, raised on the farm with their father a few miles from Kewanee, and I became acquainted with them very soon after reaching Henry county. Charles was the older of the two and loved hunting immensely well when he could sell his game, and he shot well. He followed me often in my hunts to distant towns and states. Out in Iowa, in Knox County in this State, and along the up-river towns, in 1872, when he became a citizen of Nashua, Iowa, where he remained until he died a few years later. He was an industrious worker in any capacity you placed him, and barring his defects, was as good a voyageur as you would care to have with you. He was a fairly good talker, a good listener, and, if he could not make, at least enjoyed happy hits, and was lavish in applauding them in others. He was not temperate, he loved a glass dearly, but I never saw it have any ill effects except to make him quarrelsome. His faults were more of the head than the heart, and his head was proverbially bad. I do not think his moral nature was shocked or repelled in hearing anything that pleased him or that made fun for him. He drew this nature from his surroundings, which were unfavorable and unhappy, as his father taught him disrespect for all the religious institutions that had for their object to make men pure and clean. I do not think he ever regarded the future with solicitude, and his life and that of his family was one round of weakness, wickedness and woe.

In 1866 an uneasy feeling crept in among the hunters of Sabula, that they were not getting full value for their birds, and among the rest, Tompkins, with whom I hunted early in the season. Taking that year as a sample, it was indisputably true that the birds were worth more than twenty-five cents each, which I paid them, but there were many seasons when they would not net that price, both before and after that year. As Tompkins and myself killed most of the birds that were shipped, and our total birds made us a profit of over a thousand dollars that year, we made no effort to control shipments which originated with Kindred and one or two other hunters who formed a compact for hunting together and shipping their own birds. Improper packing and frequent delays in returns and delays in getting enough birds to secure frequent shipments, seemed to present the only obstacle to their success. They knew our packing well and were as capable of doing it as ourselves. They pushed Northward by steamboat, taking their skiffs with them as far as Lansing, Brownsville and LaCrosse, along Root River and the west coast of the Missippi generally, and poor shots as they were they did remarkably well if their tale was to be believed. Kindred was so fascinated with his unexpected good fortune, he began to purchase real estate in Sabula, and was the reputed owner of some property. His companions gave out that they got $1.25 for their birds. Therefore when 1867 came round I made no effort to secure their trade and passed Sabula by. I took A. Collins, brother of Charles Collins, and John Barton, and with a tent left the Savannah country and never returned there to hunt. We examined the country North of the Galena River and as far up as LaCrosse early, and later above LaCrosse and in the Trempelau country. We found more birds about Potosi bottoms than anywhere and Barton and I had the satisfaction of getting lost in the Kickapoo River bottoms, where the mosquitoes nearly annihilated us, and I confidently believe would have done so if we had been compelled to camp out there all night. We struck this bottom a little before noon and were pleased with the prospect. Moving about among scattering birds, on beautiful ground, and loading rapidly, for the pests of mosquitoes hung about us like a cloud and got in their work when we stood still, in the course of two or three hours we lost our bearings, as this flat land was so much alike as far as we could see, with puddles of water every few rods and sometimes a pool which lengthened out and led us deeper into the forest as we went. After a while it began to dawn on our minds that the sun was declining and though we found game slowly and constantly as far as we went, we decided we must try to get out before nightfall overtook us. I suggested to Barton that we should follow the sun, as it was probable that we had come East from where we entered, and this we did. I think we walked for three hours as fast as we could walk, never, however, failing to fire at a woodcock when we surprised one on our way, and as darkness was setting in fast we came out of the woods nearly exhausted, in precisely the same place we entered. As we got on the high, open land beyond we heard Collins' gun booming about a half a mile away, where we soon found him camped and supper ready. Collins reached the same low country as we did, but he did not dive into the forest. His dog made a point in the outskirts but the bird did not rise. On walking up there was a stir from among the long grass, the bushes bent and switched and a bear that had been lying there in cover broke away into the timber. This is the only time that we ever disturbed bruin in our hunting tours. Deer were of common occurrence but we made no effort to kill

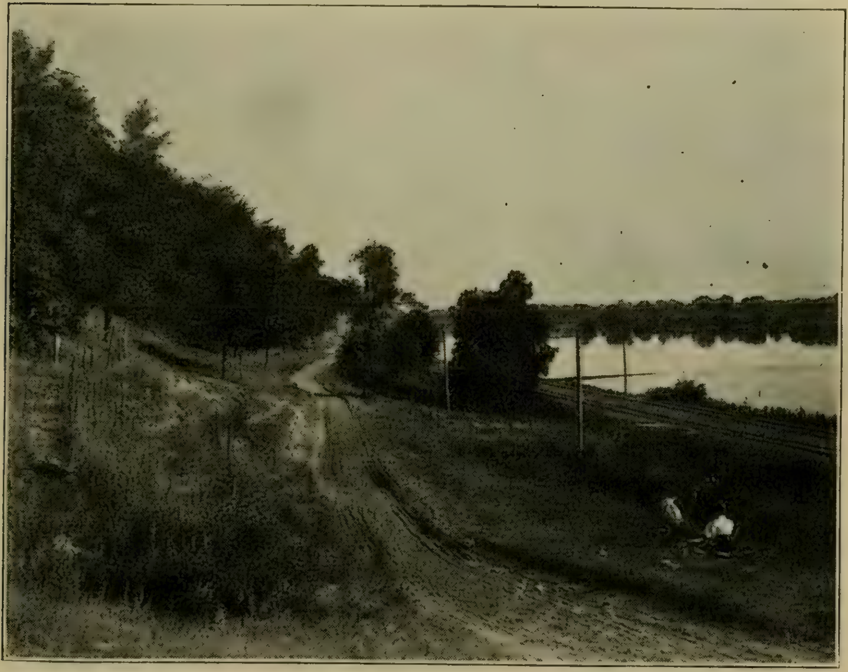


A. Collins Uncovers a Bear.

them as they were too much of a burden to carry and would have destroyed our day's sport among birds. We did not find a good country, about Trempelau. We got in among the Indians, who visited us nearly every day, now hunting ducks on the open ponds or more often sleeping in their tepees as leisurely and shiftless as Indians are, killing nothing of the game we were hunting. Everywhere woods and water prevailed. Mosquitoes filled the air and in one point of woods we were compelled to abandon it altogether on their account. We worked down the River again after getting a box or two in this place, and down along the West shore as we went late in the afternoon we applied at a landing place for provision, and were told that one man by the name of Brophy had all the stores we wanted, ice included, whither we

L. of C.

went, and over his front store door was written in large letters, "M. Brophy, Dealer in Whiskey, Beef and Beer." We named this Brophytown and stayed with him one or two days, when we fell down the River again, hunting the Islands as we did so, and at night we found ourselves at the foot of a small hamlet on the East side, and at the extreme point was an unoccupied stone building facing the river and being built directly against the high bluff, it formed a basement which was open, and as we had our provision with us we decided we would lay our bedding there and stay for the night. It was entirely dark inside and we worked our way back without striking a light, as somebody might dispossess us if we did, and spreading out our clothes we lay down, when he heard the ominous warning of a rattlesnake's tail, which like peas in a bag went rattling continually, and kept up such a din we were bound to investigate, and by the light of our torch which we now carried, we beheld him reaching out his long neck from the foundation wall half way up and throwing it in every direction with more devilish cunning than all the snakes we had ever known. The boys manifested some excitement, but I told them he would not molest us, and pulling our bunk nearer the doorway we stayed there that night. I may say here that in this trip we saw more rattlers than we ever saw before or since, for the River was high, the bottoms flooded and we were compelled in traveling along the shore to skirt the great rocks which hung from the mountain shelves, and there the venemous reptiles lay, but they were not dangerous. Many times I shot them when discovered, and on one occasion when my dog was a little in advance I saw a very large one. I stepped back one or two steps to dispose of him, when the dog, seeing me raise my gun, turned towards me to know what I was doing, looking up meanwhile at me and not noticing what lay beneath him, he walked square upon the rattler and stood upon it, and I expected the snake would strike him every moment. I tried to scare him off, but to no purpose, then I ran off at right angles and the dog followed me, when I turned and dispatched the reptile. Unless they are struck they are not likely to strike back, but then, they are like good Indians—the best when dead. I never knew anyone bit by them but the sight of one coiled will make you shudder.



Above La Crescent, Minn.

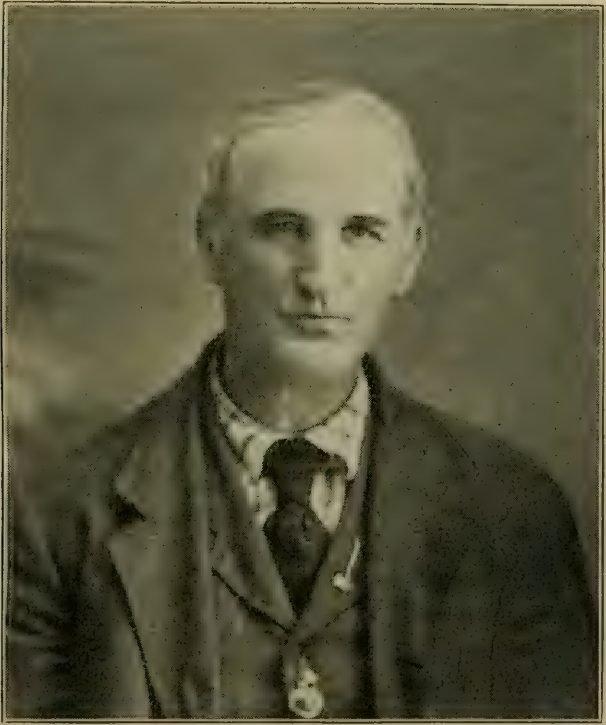
Dresbach, Minn.

We did not get over a dollar for birds this year; some sold for seventy-five cents and one box we lost. My real estate man at Sabula was not very active. We did not run across him and there was no very great inducement to ship. I heard no more from him for several years, but I learned afterwards that he did kill some birds but his trade never reached any great proportions, and his shipments were so irregular and desultory they could not have paid him much. Such speculations were like all others. If you hit it makes a fool of you. If you fail you quit. A steady pull brings the surest rewards and a loss can be recouped by evening up with the profits. Eighteen hundred and sixty-seven was not a good year, but we made something, and the $150 with which we returned home we turned over to S. B. Randall, of Cambridge, on settlement for an unprofitable trade in poultry the preceding winter. Coming down the River this season we stopped again at Potosi, where we had been in the early part of the season, twelve miles above Dubuque, and spread our camp on the west side of the slough, which was on the east side of the River, over which passed the long bridge, which led to the river shore. The water was high and copious rains continued to fall. East of the bridge the highway led to Potosi, wriggling and twisting about between mountain precipices whose waters lashed their way in ghostly clamor to the pools below. East of the bridge was a flat space of land where great cotton woods reached their arms into the air and sent unbroken shade to the adjoining hills. I think Friend Collins will remember this place, so charming was the scenery all around the bridge, which the sun reached only in mid-heavens. The dust and noise of highways and thoroughfares dropped through the thin air and clung to the foothills. The swallows crossed and recrossed the waters, dipping their wings like a light oar skimming the surface. Many times Collins and I sat alone when the day's work was over and revived old memories, without the jar of much argument, looking only at the quiet side where all was peace. This day he seemed to have grown out of his usual silence and he asked me abruptly, "What do you think of men, anyway? I think they are selfish from first to last, every mother's son of them, don't you?" "Why, Lon," I said, "it depends a great deal how you take it, what ground the word selfish covers. Anyway, it don't mean us, I suppose," and gave him a quiet smile. He turned his eyes away a moment, as though he was afraid he had provoked argument, and then, looking down,

Collins Asks the "Unknowable."

continued, in his menacing way, that he did not believe I would deny the impeachment altogether, and then we sailed in, not angrily, I think, but on opposite ground, which broadened out after a while from religion to politics, he denying everything and I claiming everything. Of selfishness, I declared it must not be confounded with self-love, which every man has a part of, and that no one had a right to trample upon this instinct of our nature. "Well," he continued, as though he had struck it this time, "you church people are great hypocrites; you always think you are a little better than anybody else, but I never could see it." Watching his eye, I said, calmly, "Did you ever try to see it? There is a great deal in that. Now, I did try and set myself on guard for that one thing. When I first came into the country a man of great influence and more prejudice advised me that I would find the church people more deceptive than anyone else, and to let them alone as untrustworthy, and I now declare to you that his whole theory has proved fallacious. Taking samples from each, in church and out, the churchman has held his own remarkably well, where the unchurched has gone down." Again he remarked, "I suppose you believe in a man's getting religion and all that?" as if that was a stumper; "I never wanted religion if it was like what these people say it is." I replied, "You probably never heard them say, as you claim you never was in a religious meeting." "Well," he said, "where is God, anyway? I don't see him and I don't know as there is one, anyway." I continued, "Shut your eyes and you will never see, shut your ears and you will never hear, and the mysteries will never unfold to human souls." He said again, "You think that God can forgive sin, do you? I do not." "Why not?" I said, "Don't you forgive your child when he asks forgiveness? Suppose you had offended someone, would you not go to him as the proper person to forgive your offense, and if you did not go, and he should come to you, wouldn't you say that he who suffered the injury was the proper person to forgive it. So God says, 'I will forgive you because you have sinned against me.'" He softened a little, with a quiet look, and continued, "Why don't God show Himself so I could see Him? Then I might believe on Him." "That is a question as old as the human heart," I replied, "and you may put it down once for all that the Highest Power always does as it chooses, in Heaven or in earth, and the highest mode of existence is in that form which God chooses, and that is a spirit." We relapsed a while into politics, and as Collins was a great Democrat, we did not press our views much farther, and the talk ended. I was alone, but the long bridge and the cottonwoods and the shadows! I was delighted with the shadows. Other shadows came and barred the sunlight and threw their taper fingers far over the highway and the sickly stream which flowed beneath me, and the gloom came with the evening, and at the end of the long bridge was sunlight again. And I heard glad voices calling unto me, oh, so sweetly, singing the songs of the angels until the harmonies of earth and sky seemed to meet and mingle in tenderest embrace. The sun declined. For a while it shot out shafts of heat and light, till, tired of its unequal fight with spectres, it sank into its chambers. And there was heard the soft notes of viols as of an angel band disenthralled of pain or passion, sweeping the tender chords with the skill of artists and no human love, not the deepest enchantment of woman, could reach the sublime heights which their melody created.

Night followed and dissolved the shadows, and the illusions lost their color and form. The mists were slowly rising from the river, the damp with ample folds was spreading over the hill sides and along the highway, and the cold hovered around me till I regained shelter, but the vision remained till the day dawned and the shadows fled away. Dear old river, when the visions become realities there shall be no night there!



The Trusty Man.

Of A. Collins it is a pleasure to write in high praise. Brought up with the same unfavorable surroundings as his brother, and sedulously instructed to avoid houses of worship as sanctuaries of hypocrites he early learned that what he did not understand or appreciate, he should not sharply criticize or condemn. I think if he had been brought up in a Christian family, his life would have been sweeter and better and more inspiring, and more often he would have seen men as living souls and not as trees walking. Be that as it may, he has always been a thoroughly honest man, and in the many years he toiled with me he committed no act which I would care to blot out or strongly shade. He was to be trusted anywhere, with any mission he was competent to fill. He made a wise choice of a small

Spechts Ferry.

farm north of Annawan, many years ago, and it has so improved under his fostering care that it supports him well, and he can now pass his days in peace and plenty, assured that he owes no man anything. I always compliment him on his laugh, for it is inspiring, as soft and coy as a maiden's, and his drooping lids cover up no traces of undue boldness or temerity. We wish him a long and happy life, and that he will never forget to sing the old refrain,

"What shall we do with the drunken sailor?
Put him in the long boat and let him bail her."

For many years it became apparent that no man could carry on the game business with success where his market was a thousand miles or more distant unless he could establish, from time to time, the following propositions: First, that he could cool his birds off on ice and keep them there sweet for ten days in Spring and Fall, and then ship them without ice and without deterioration. Second, he could keep his birds dry in cold air of about 30 degrees F. and ship them dry for thirty days or more, dry chilled and safely. Third, he could freeze his birds and keep them frozen and then ship them safely after six months or more. Fourth, he could pack his birds in air-tight packages, frozen and kept at a low temperature, say about 20 F., and keep them uninjured for one or more years. The two former were comparatively easy, the latter more difficult, but by 1890 we believe we had accomplished it all.

When we shipped in the early years, from 1861 to 1870, in the Spring, and cooled off the birds thoroughly on ice, we never lost but one shipment, and that was by transferring them from one town to another and letting the warm air work in. With light shoe boxes, as square as we could get them, we pressed them so closely, and they carried so much cold with them and retained it so well, that the birds could not damage in two or three days. We frequently shipped eight hundred birds in one box and we received sale for every one of them, when sold, with prices ranging generally from two dollars to two and a quarter most of the time, and occasionally higher. Time and again we were warned by our consignee that we were likely to lose a whole lot any time if we did not ice them, but we did not lose them nor did we ice them, and our express was so light that it was very profitable. We now proceeded to freeze up our birds and hold them in hot weather. We had been in the habit of freezing them in their natural state in cold weather in Winter, when prices were too low, and carrying them through the dull season till prices became normal again and then unload them. Turkeys and ducks were for a long time frozen and held by packers in this manner at high altitudes where heat did not come till late. We even kept woodcock one season from November till the following Spring in a large double grocer's box, opening or closing the lid according to the weather and never allowing them to thaw. We filled this box with grouse and quail in December and sold the lot in February following for $600. We took a small sled load of mallard ducks one day in November, just as the ground was freezing up, which cost us two twenty-five per dozen, packed them snugly away where the air could not reach them after they were frozen, and in the month of January following surprised the dealers in New York by marketing them there at $6.00 per dozen, and the buyers were so numerous and so insistent that the only way we could do to prevent a fight was to divide them, and this we eventually did.

In 1870 we heard of a fish dealer in Sandusky City, Ohio, who had a patented freezing box for butchers and poulterers, and we went there and saw the owner and the box, which was a very good one for that early day, and we purchased it for $150.00. Later we discovered the patentee in Chicago and we bought two more boxes of him, which were to be of the same style and quality, but they were not. With these boxes for a starter, in the fall of 1870, with the assistance of a good carpenter, we set out to build our own freezing rooms. We built them below ground and though they were inferior to those that came later, we could and did freeze birds fairly well in summer with the aid of the first box we bought.

In the summer of 1871 we filled it full of woodcocks in June, and kept them in a fairly salable shape till September, when we sold them on an order from Edward Sumner. We packed them in a can used for ice cream, put ice around it, and when they arrived we received one dollar per pair therefor, which we thought was a good price for them at that time.

We built an outside freezer in Atkinson in the Fall of 1871, and we filled it with mallards, packing them frozen in November and December as they came in, and as the temperature was generally low outside and we had pans to freeze hard inside, we laid them on top of one another in tiers until the room was nearly full. We had no opening in the outside but we descended always by a door from the top. After a while the birds seemed to settle a little, and we packed more on top until we had it full, with probably fifteen hundred in all. On the top shelf where we went in we placed a few snipe which came in the last of the season and after all the Fall birds, which were packed on ice, were spoiled. Before January was over I went to Kewanee and left the place in charge of R. E. Bailey. It was soon getting time to ship them out. After taking a few boxes off the top a peculiar smell began to arise and he soon found that the inside birds were getting soft and spoiling. Before he reached the bottom I think one-half had to be thrown away or sold for small price. This year the price for the best birds was only 62½ cents per pair, and the demand was very slack at that, but we emptied the house. The weather was very cold and the birds went through cheaply by freight and as good as they left us and our loss was not heavy. The few dozen snipe remaining on the shelf were separate from everything else and they kept well frozen and sound, and in February Sumner gave me four dollars per dozen therefor. These were the first frozen Fall snipe that up to that time had been kept over the winter and marketed in good order. The mallards spoiled by connecting with the ground which drew the frost from beneath them. The Spring came again. We packed about twenty thousand birds. We shipped half of them or more and endeavored to carry the rest until the summer, or when they were called for. Prices were good in May and June at about $2.50 to $2.75, but we were confined entirely to orders if we maintained our price, and the orders came now only from A. & E. Robbins that year. By August I saw the birds were not as good as they had been and his orders were less numerous and there was no prospect that he would clear us all out, as woodcock were now coming in. Our rooms were not cold enough and we could barely keep them frozen with great care and expense. I employed a Mr. Loyd to care for them and I went off on the river. In the Fall, after vast quantities of ice had been expended, we threw the balance, several hundred dozen, away. In the Fall following we tried it again in our freezing rooms at Kewanee where there was less trouble to care for them, and in looking at them in the winter I discovered they were getting mouldy, which is the first stage of decay, and when Mr. Lyon soon after asked if I had any snipe I took out a box on his order and sent them to him, something over four hundred in number. They looked so bad and smelled so musty, I put the balance in another shoe box, about the same size as the one I shipped, took them down near the railroad track and buried them in an open ditch, which the company soon after filled up. In a few days Mr. Lyon returned me over one hundred dollars for the lot I sent him, and those I threw away were equally as good. This is introduced to show the quality of birds which at that time could be sold and which now would not be received at any price. The next year I reduced the temperature somewhat lower, and though the birds did not open in the Winter quite what they should, I sold most of them to Messrs. Robbins for $3.50 per dozen. The demand now seemed to be increasing, and to cut this story short, from 1873 or 1874 to 1878 or 1880, we had uniformly good prices. I packed all the snipe I could in the Fall, frequently getting large numbers in Chicago at about $1.25 per dozen and selling them in March for $3.00 or more, and no one offered any competition. By and by, as the demand was very great in the early spring and too little in summer for all we got in, we conceived the idea of packing them up in iron cans, and so carry them through as air tight as possible till the Spring following, and then we would have no surplus to lose, but it was doubtful how many the market would take, and we operated with caution and with a feeling of uncertainty with the first lot so packed. We had one room which stayed remarkably cold, somewhere about 20 F., and in May we packed there over a thousand dozen, besides leaving out enough for our Spring and Summer trade. In the Fall the season was wet, so that we added a good many more, and when the Spring opened we had nearly fifteen hundred dozen. This was about 1875 or '76. It was very cold in February and we went to New York with all our snipe and plover, and some poultry. We began putting out our Fall snipe at about $3.50 or $3.75, and sold most of them at that price, and they were in fine condition and highly spoken of. It remained now for us to dispose of our canned stock, for which we had no little anxiety. Prices had now begun to fall, receding to $2.50, and at this price we marketed all our birds of the Spring previous before fresh birds came in, giving us now two chances to unload the crop. In 1876 we had in the Winter some three or four hundred dozen Fall snipe and about fifty dozen golden plover, and in the latter part of February, Mr. Lyon wrote me that there was going to be a big demand for good, dry frozen birds, and he asked me if I had any, and as I had on one previous occasion sold A. & E. Robbins fresh birds as high as $4.50 per dozen, I informed him that that was my price now. These were fine birds, not mouldy at all, and he advised me that he did not think he could get that price, but if I would send him a barrel he would be sure of $4.00 and he would try hard to get the $4.50, and, anyway, it would get them on the market, and the quality would be ascertained. I sent him the barrel which he sold at

$4.00, he volunteering the opinion that he did not think he could get any more. However, next day he ordered a barrel at $4.50 and the plover at $3.50, and in a day or two other offers came in for over eight hundred dozen at this price, and some who offered $4.00 raised the price to $4.50 before the day was over. In 1877 we were carrying a small amount of birds, as the Fall was dry and unfavorable. The time came for orders and they did not come. Neither dealers nor commission men made any inquiry and we were mystified a good deal. Finally it was getting so late I wrote to J. A. Lyon to know what was meant. He informed me that a man in my country, in Erie, was sending what birds they had so far needed and when they were sold mine would be called for. As this man at Erie knew little or nothing of possible values and the buyers offered him $2.75 per dozen, and it made him a good margin, he ordered them sold. After this it was difficult to raise the figures and we had hard work to get the same. This man had been with me in several excursions, as will appear later, but was anxious to get him a breech loader and asked me to get him one, which I did. As a year had elapsed and he had not been able to pay for it, he solicited a chance to work for me in the ice house in winter when I was packing, to pay the debt. I took him on and, in the course of the winter, he learned enough to think he was proficient in packing and handling birds and freezing them. When he returned to Erie he put up a small freezer on his own account and packed the neighboring birds of two or three towns. This was why I had no call, as the dealers knew it would cost them more if I did. The next year Spring snipe were very scarce and sold in New York as high as $3.50, and the Erie man made quite a hit. Then I went over to Erie and I employed a man to buy for me and he ran the price so high the jig was soon up. He could not get birds enough to pay him to run his freezer after Spring was over, and in the following Winter, in the last of January, I was surprised to receive a letter from him, stating that he had two hundred dozen good snipe and he would like to sell them to me. As I had only seventy-five dozen which I got from Chicago in the Fall previous, and was very short, I asked him his price and he replied that he would deliver them to me for $2.00 per dozen. I ordered them on and in two or three days he arrived overland with the birds. I gave him four hundred dollars and sold them all within thirty days for $4.50 per dozen, when I felt that I had squared myself with him. Later he went to a telegraph office above Omaha, and eventually to Stewart, Nebr., where he persuaded a party to put up a freezer, and where he was in 1895. He proved himself dishonest in every position he was in, although he was a man of good mind and ought to have made a success. He was a good telegraph operator, but he could not hold his post. From 1871 we continued to freeze woodcocks and sell them frozen. We seldom carried less than five or six hundred pairs, and sometimes very many more. One day we received an order from an unknown party in Fulton Market for forty dozen at $1.25 per pair net, which I thought might be a mistake for four dozen, as it was an unusual number for one order, but I sent them and was glad to receive a letter a day or two afterward stating I must not fail to fill the order. Later in the latter part of the eighties, we received an order from A. & E. Robbins for a barrel at $1.50 per pair, and he liked them so well he continued ordering till he had received thirteen hundred pair, all of which arrived in good order and were promptly paid for. Very many barrels were forwarded and sold in those years between 1878 and 1885 for over three hundred dollars per barrel. These sales of woodcock I generally entrusted to J. A. Lyon, as well as the snipe, unless I had a direct order. One year prices did not go up above one dollar and I did not sell. I put them in barrels and carried them over till 1884 and then shipped a carload of all kinds of game at once, in September, including canvas backs, red heads and snipe, and we packed the car in ice and it arrived well and sold well, except the woodcock, which sold only a barrel or two at half price, and we had them returned to us in cold weather, but we never were able to dispose of them. We saw, moreover, our birds were not keeping as well as they had been, and we decided either that our rooms were getting in bad order or that we were carrying the birds too long. We did not think it would be the latter, for many of our oldest birds sold best. We found there was very much difference in the keeping qualities of different birds we packed, in general the fattest birds turning out the best. The early small snipe did not hold out as well as the later, and as it happened we got two or three barrels of the lighter sort where we got one of the heavier. We had a good many barrels of the early snipe which we had carried over from the year preceding, and they were getting mouldy, and I could not place them on orders. We rubbed the mould off the fat birds and they sold well, and the last two barrels we had of stall-fed pigeons, which were very fat but picked and covered with white mould, we cleaned up so that we heard no complaint, selling at the extreme price of $2.50.

At this time in the Spring the crop of snipe was very small; fine birds sold readily at three dollars per dozen the season through. In June I had only two or three barrels of them left. The year before, I had become acquainted with Messrs. H. L. Lawrence & Co., of Boston, and now the birds giving out in that city, his buyer came to Chicago, expecting there to get his supplies. As he failed he planned to come down and see me. I had at this time a large supply of fresh grass plover and I sold them about a thousand dollars' worth of birds within an hour after he had arrived. He took what fresh snipe I had at $3.00, a good many barrels of grass plover at $2.00, the small mouldy snipe at eighty-five cents, and the sand snipe at twenty-five cents. I was fearful he would have some trouble in disposing of the mouldy birds, but he said afterwards he did well with them on account of the scarcity of better birds, and he gave me about fifty per cent higher than I could get in New York.

DOW BIRDS SELL WELL.

I had a few barrels of Dow birds. They seemed to keep better as they were very fat, and what little mould there was rubbed off easily enough. These brought me six dollars and a half a dozen when winter came, and I had now reduced my stock of old birds so low that I only had twenty-five or thirty barrels left of all kinds, and I considered it the best time I would have to rebuild my freezer. I found that the same ice did not produce the same cold after the freezer had run twelve months or more and it began to have an old smell. The longer I run it the iller it got. I initiated a new plan at that time, of entirely isolating the rooms from contact with outside air. I not only made the walls so thick and so numerous that they were impervious to heat or cold, filling the spaces with dry charcoal, but I built a new room entirely inside of this outside shell and made the air have connection from one side to the other so there was a constant movement all around the outside. Immediately on completing this a great change was wrought in the appearance of the birds and the temperature declined several degrees lower and remained there more steadily, so that if any sudden change occurred from any outside cause, there would be more degrees to spare to reach thawing point. As the winter passed away, I accumulated a large stock of quail, and I hardly dared to risk them through the season in ordinary packing. I fell back to the cans, which I had used two or three years previously for snipe, and as they were altogether too large to handle with ease, we made new ones and smaller, and we experimented how we should make them air tight. The cans, as now made, held about the size of a sugar barrel. We marketed the remaining old birds whenever we could get an opportunity, what were good selling readily.

Some were showing signs of mould that we carried through the summer and we had to sell them at a loss, and dealers began to complain and to discriminate against us, and in the winter, with much effort we sold the stock all out, the fat, heavy birds doing very well, the poor birds at a low price. We found canvas backs and red heads would sell well and look well the winter following, but if carried farther were very liable to show decay. As we were packing about three hundred barrels a year at this time it was necessary to improve our packing and storage. We took four or five hundred dozen quail that we had left in the Spring and packed them in cans and sealed them the best we knew, and they cost us $1.50 per dozen. In October they opened up so well we sold them to Fred Smith, of Chicago, for $2.75 and $3.00 per dozen, and Fred declared they were the finest he had ever seen held. We laid out over one thousand dollars in cans in 1890 and 1892 and they paid for themselves handsomely every year and we could fill them again very many times. Even if we had to lose the cans every year it was a great success. Finally we packed all our game in cans and when we kept the temperature steady and low enough we never lost anything. We began to pack birds from all along the river, from Wabasha to New Albin and Lansing, and as far down as Savannah, and by putting them in shape secured the top price for many really poor birds. Wet birds we dried, rough birds we smoothed out, and if the meat was sweet and sound we made sales readily. We bought large lots of snipe in Chicago and quails and red heads and canvas backs in their season for many years, and we had no trouble to dispose of them at good profit. The first canvas back and red head we held in barrels in 1883 to 1885, and the trade was not as critical as it is now. They usually sold at $2.50 to $3.00 per pair for canvas, and at 75 cents to $1.25 for red heads. As the canvas change their color from Spring to Fall, dealers began to be wary and demand Fall birds and Springs birds were not much wanted. Teal also, which had been selling at about sixty cents a pair, sold anywhere from twenty-five to fifty, on account of their changed color in the

Spring, while green wings, red heads, quail, grouse and partridges and snipe did not publish their age. In 1885 or 1886 there was a distinctly loud call for canvas backs in December and I received an order through J. A. Lyon which did not specify anything, whether Fall or Spring birds, and, in fact, the question was not raised. In the previous year I had received quite a good many red heads and canvas backs and the red heads did not seem to sell. We kept them in New York for several months and were at last forced to sell the red heads at 85 cents per pair. The canvas back we disposed of earlier. When Mr. Lyon wrote me that he had sold all the red heads he advised me not to put up any more frozen ducks, as they were discriminated against so much. Without paying any attention to his advice I sent a buyer to the Illinois River in March, who gathered up, with a little outside help, thirty-six barrels, red head and canvas, six barrels being canvas and the balance red head. The canvas cost about $6.50 a dozen and the red heads $2.50. When Mr. Lyon inquired if I had any canvas backs in the winter, as I have stated, and what price I wanted, I informed him they would be five dollars per pair, as I had seen some quotations at that price, and that I had six barrels which would count about two hundred pair. In two or three days he ordered them by express and it was now very cold weather. Messrs. A. & E. Robbins got the birds, to be delivered on an order which they had previously received from Delmonico's, where they were offered and refused by that house because they were Spring birds. This threw them back on Messrs. Robbins, but as the birds had been accepted from us, after some grumbling and a demand for a reduction in price, they were finally paid for as we sold them, After this there was a steady call for red heads in February and March. We sold a barrel in December for $2.00 per pair. Later they raised to $2.25 and $2.50, and the last three barrels were sold in March at $3.00 per pair. The market was in such a delicate state we could only sell one or two barrels at a time, but when the last barrel had gone we found we had a net profit between twenty-nine hundred and three thousand dollars on the thirty-six barrels. That was the high tide on them, for although birds further advanced to $6.00 per pair, we only sold two or three barrels afterwwards to Sumner as high as five dollars a pair for Spring birds.

In 1867, at the time of the rupture at Savannah and Sabula with the hunters there, we conceived the idea of building a small steam boat, run by ourselves and drawing but little water, with which we could penetrate all the back places along the river where the birds were the most plenty, and in 1868 we began to put this plan into effect. It was the more necessary because the railroads were not running up far on the east side and none on the west side of the river, and it was extremely difficult to reach the best ground with a skiff, and more so with the ice which made our great burden. Besides, we had to ship by steamboat at the nearest landing we could reach and thence they were transferred to railroad towns, by which, in the long run, we lost one or two boxes and several more were damaged. By means of a steamboat we could use our own conveyance and could provision it and make our shipments and have our home on board. We contracted with a boat builder in Davenport, Iowa, to put us up such a boat as we needed and have it ready for delivery July 4th. We hardly knew what we did want and we left the construction very much to the builder. It was to be forty feet long, eight feet beam, model bow, side wheel, and the engine to be three horse power. There was a walk around the boat of two feet more on each side. The front, in the hold, was divided off into a large recess for ice and a circular roof covered the whole. We did our cooking in front and had our sleeping berths in the back end. Also, we steered our boat in the beginning from the front. Later we abandoned it for the stern and with a raised platform we had the pilot house there. The boiler was a poor, second-hand affair and it would not at this day have been tolerated in any water, but it was not intended for passenger traffic or fast sailing, but with some improvements it answered our purpose as long as needed. This little vessel we named the "Firefly," from its diminutive size and the flash light from the smoke stack.

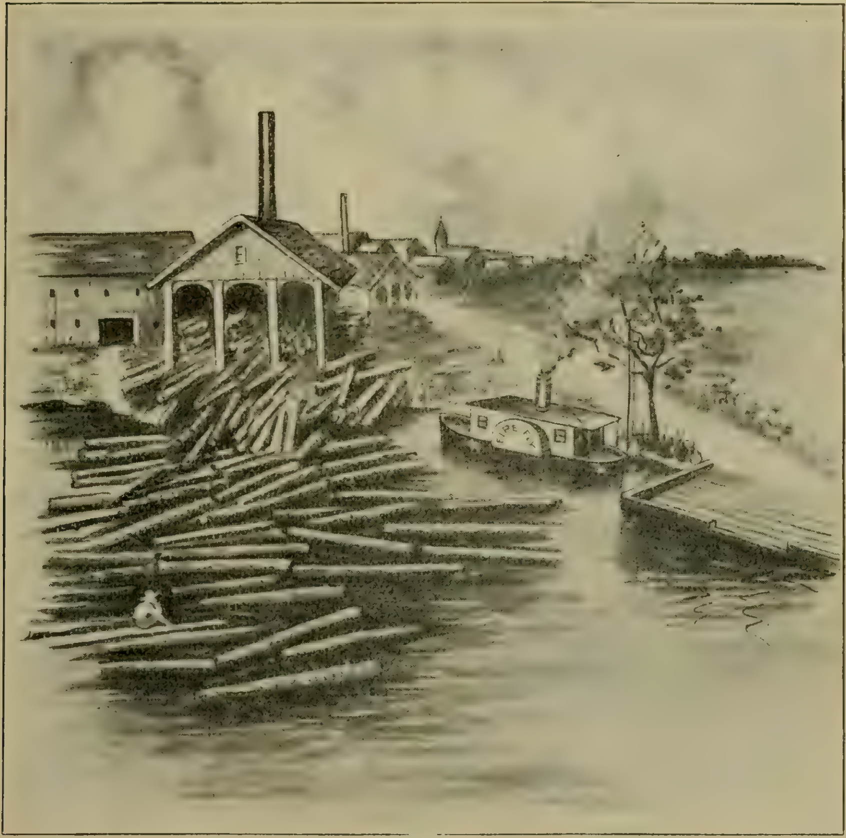
This is the boat that once was tossed
From Island Rock unto LaCrosse.
Unknown its nature or its name,
Whither it went or whence it came.
No penant flung, no beacon flew,
No seas of foam inspired the crew.
Without a pilot or a chart,
Without a merchant or a mart;
Past the great ships that hurried on
To their own land, this one had none.

Past rising towns whose stately stone
Fell down before the great cyclone,
Never a timber, never a spar,
Floated the vessel near or far,
By lordly barons owned. Its keel
In shallow waters planned to steal,
By lonely pools and fetid fen,

Forest and rock and shade and glen,
Beyond the homes and haunts of men
It journeyed on.

The hull of the vessel was framed very strongly, with ribs of oak a few inches apart, and this, with the floor laid of only one-inch boards, saved us from foundering many times. The machinery was not fastened to the bottom of the boat as solidly as it should have been, and as we shall see, soon caused us much trouble in a trying moment. When we learned the boat was completed, immediately after July 4th, Mrs. M., myself and the two boys took possession at Davenport, in a very hot spell of weather, and there selected our companions du voyage. We lay there for several hours, tied up just below the wharf of the ferry boat, completing our outfit of ice and necessary provisions for an absence of a week from the city. The river below and partly abreast of us was shut in by a boom of logs that started from the boat and ran out many rods into the current, and the delight of the boys was to walk the logs and wade in the river. We were all very busy and did not notice for a while that either of the boys was absent, but when the knowledge became known to us, Clarence, the younger, was found sitting on one of the logs many rods out in the stream, and when told to come in he was disinclined to do so. However, the usual persuasion discovered to us he had slipped off one of the logs into the river and was now trying to dry himself in the sunshine. He made no outcry or expressed any fear, and he looked to me very much like a New Zealander content to sit on his log and float away to any shore the winds might carry him.

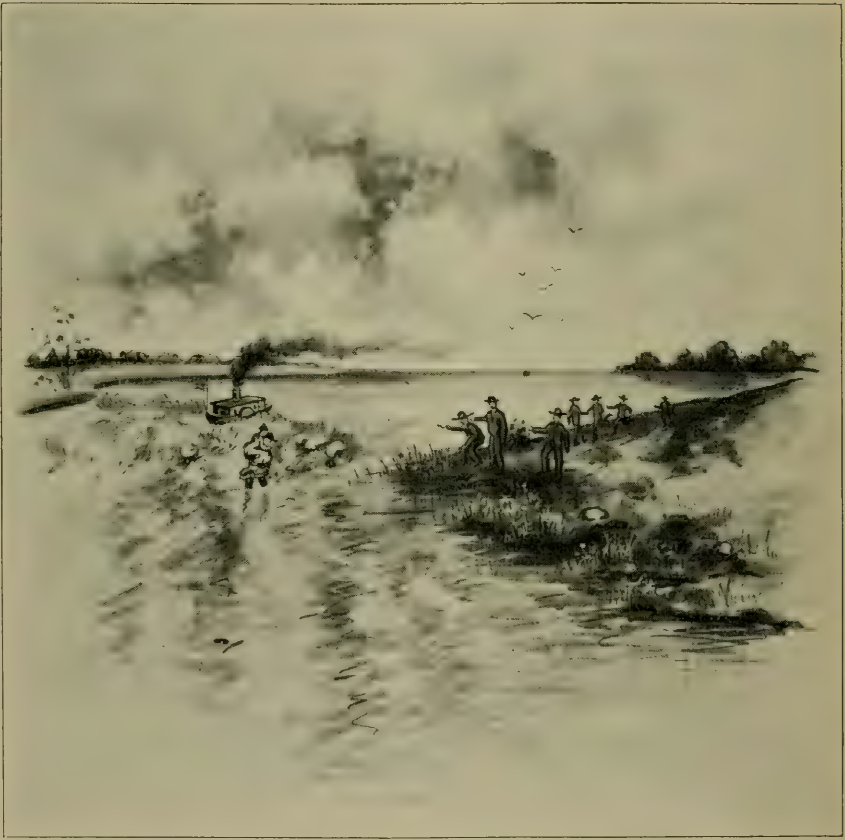
We had a small amount due yet on the boat and



The Boy Too Busy to Drown.

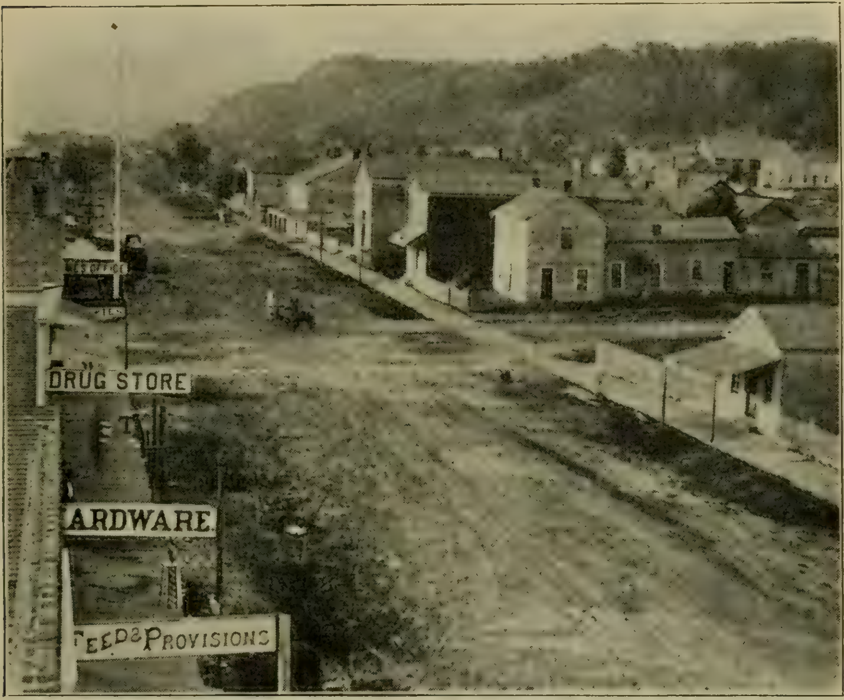
while the fire was starting in the boiler I went to the Rock Island Bank of Lynde & Co. I never had been in the bank before and carried no reference, and merely stated I wanted to draw one hundred dollars on New York, and that the little vessel built across the river was mine. The banker made no objection, asked me for no references, handing me the money, and, by five o'clock or thereabouts, we started on our journey with the rapids before us.

We expected to hire no skilled machinist, as the hunters we took on board had some experience, and they soon learned to handle the boat fairly well. I think there were nine men of us besides Mrs. M. and children. Among the rest we carried the two Ogden boys, James Joles, Bart Potter, Johnny O'Brien, Ike Seyberts, Charles Collins and Orm Brown, a motley crew, with no bonds to bind them further than the profit they expected to make and the novelty and fun of the enterprise. Ike took to the furnace. Collins guided the wheel. The rest left on foot one way or another, advising us to go ahead and they would meet us farther up the river. They had no dogs and we did not know why. It did not develop for what purpose they went till we had got along up a mile or so above the city, where we stopped for the night and the hunters began to come in, each of them with one or more dogs. We found the water very swift when we began to pass the railroad bridge and continuously afterward, and we ran over just before dark on the Government Island, expecting to find the water there less rapid. While we lay there a few minutes trying to increase our steam, an officer found us and informed us we must not stay on the Island longer than we could possibly help. We soon steamed up again and landed on the west shore, camping for the night inside the fence on the long grass, a pleasant place enough with all the cover we wanted, for it was very hot. We started early in the morning, following the dogs tugging at their chains and yelping a miserere by the time the smoke left the smoke stack. It was suggested that we hitch them on and have them draw us up the river, as there were no whales in sight, and their superfluous power was being wasted. Their bark, when tied up, was like steam pipes under pressure and their grand notes and high solos were proof against sleep in the morning. We got away, some by water and some by land, with a current not now very swift as long as we followed the line of the shore. The boat was not drawing over one foot of water. By middle of the afternoon the boat was abreast the coffer dam, which begins somewhere opposite Moline. Then it proceeded slowly up several miles, receding farther from the west shore and meeting much rough water. Whether the rocks threw the helmsman out into the channel or whether he was experimenting to find easier water, I never knew, but looking across toward the middle of the rapids from the great flat which forms the bay below LeClaire, we saw that the boat was there and in trouble, and evidently on the rocks outside of the channel, and apparently unable to get away. It developed afterwards that in this crucial moment the foundation of the machinery tore up and it required some time to replace it strong enough to hold till they could pull off the rocks. Marion Ogden was on shore with me nearly half a mile off, along the deep bay that reaches into the mainland on the west shore. The water was not deep between us and the boat, and for fear it would not get loose and because Mrs. M. was on the boat with part of the crew, and suffering terribly from the heat outside and inside, he made his way to the vessel, took her in his arms and transported her to the shore. About the time he reached there the boat got loose again and gradually worked its way on up the river till it reached the point by the old mill, just below LeClaire, where we passed the night, all hands being present. In the morning we had only a short space of rough water till the upper end of the rapids was passed and we continued on up easily. To the people of LeClaire



Mrs. M. Makes Off with Another Man.

we were a wonder of wonders. Their evening sheet came out with a long account of the new arrival, which, it stated, was composed of men, women, children and dogs. Getting some provisions, we left LeClaire, still following up the west side till we ran into some old piles, the remains of a former lumber fleet that were sunken under the surface of the water. They were cut off smoothly on the top, over which our boat traveled and nearly balanced

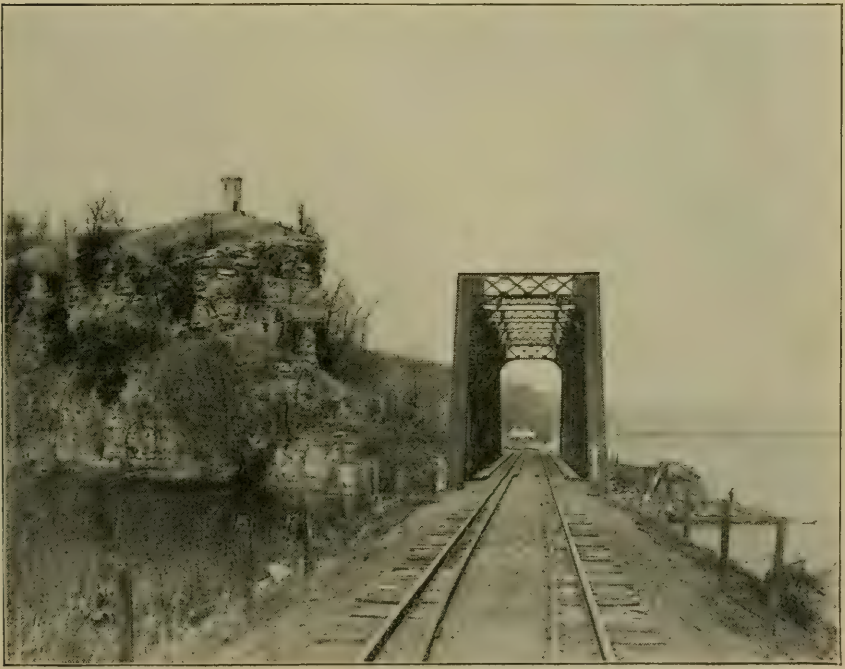


Savanna—Old Town.

itself when about midway, and held so fast we thought the bottom had pushed through. Luckily it did not, when, passing over to the east shore, we resumed our way and before noon passed Port Byron. We continued on up to Camanche, making that our stopping place where we could get our table supplies and in the morning dropped down to the Wapsiepinicon River, where we did our first hunting. Mrs. M. was so overcome with heat we had to carry her out on the shore under the shade of some great trees where she passed the day. We stopped at the mouth of the Wapsie and there Mrs. M. discovered the first and only humming bird's nest we ever saw. The nest, holding two eggs, we retained, which we brought home with us when we returned. Unfortunately the eggs were broken, but the nest we have kept ever since. In the two days we were at the mouth of this river we killed one hundred and thirty birds, shipped them at the end of the second day at Albany, which village had been riddled and torn with the battle of wind and hail in 1860. By the time we reached Sabula we had our banners all out, moving closely along the Iowa shore with great crowds meeting and cheering us as we went, and with wind and steam we saluted them all. About twelve miles further up we reached Huntsville, an insignificant place at the mouth of the Maquoketa River opposite, before we began to hunt

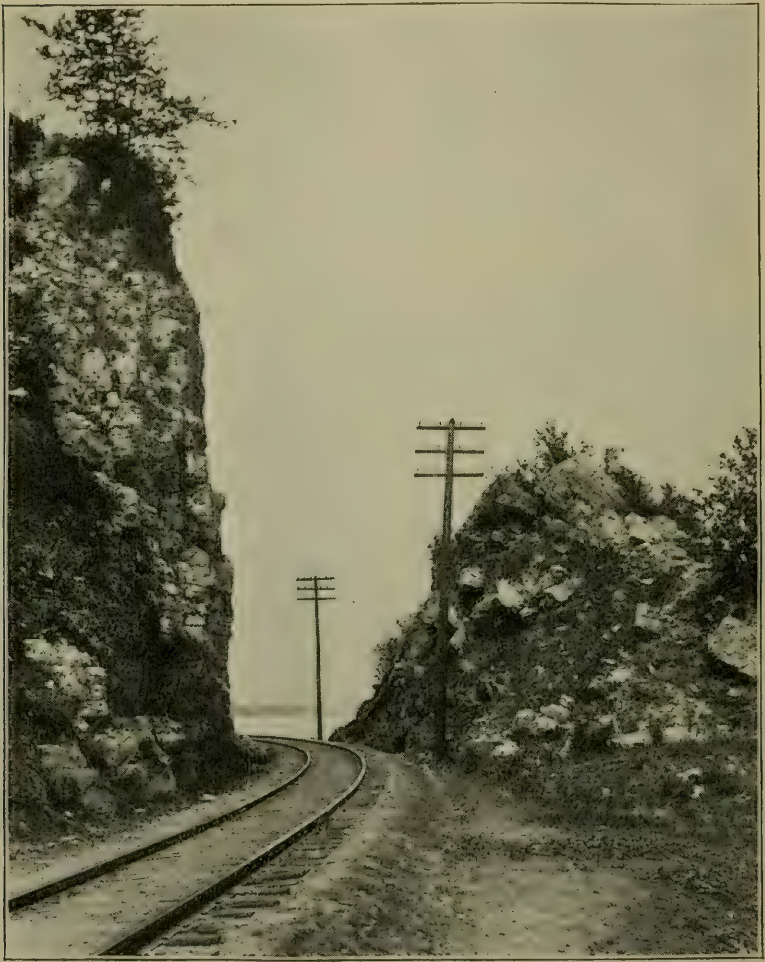
Maquoketa River.

again. Farther up we passed Bellevue, then crossed to the east shore, took up a Slough that runs along past the mouth of the Galena River, then out into the main channel again and along the islands below Dubuque. Often when the boat was moving slowly along some of the crew would rush ashore and shoot a while, then jump on again when they got a little tired or reached a slough they could not cross,



Dubuque's Grave.

and in this way many woodcock came in. Next day we passed East Dubuque, and further up about five or six miles we reached the islands where Collins and I had such good shooting two years before, and here remained one day. Then we took to the Slough



Rock Cut on the Catfish below Dubuque.

again, which begins close by the lower point of the island and runs back up the east side and ends at Grant Slough, from which a canal is cut into the river opposite Specht's Ferry. We passed up to the bridge that crosses the road to Potosi and the river and could not get under the bridge on account of our high smoke stack, which we had to take down. We tarried one or two days alongside of the Canal and found many birds. While we were away from the boat one day, two deer crossed the Slough close by, which were the only ones we saw on our route. There were wild hogs innumerable and Collins shot one, and it was dressed and served up on the boat. It had a wild and unsavory taste and we preferred the hams which were our usual fare. After going through the canal into the river we went about a mile farther up till we reached another slough on the east side and, following it along up to its upper end, we stayed a day. Close by, on a bend of the

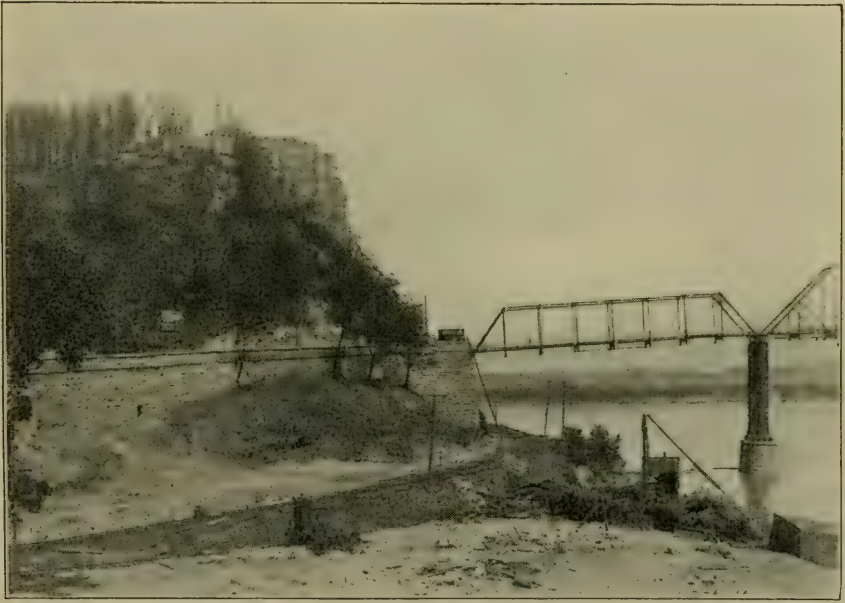
Dubuque.

East Dubuque and Railroad Bridge.

Mouth of Catfish, Below Dubuque.

slough, we found a little spring house with a stream running from it, and looking in, the boys found pans of milk which they sampled freely and afterwards named it the Milk Slough.

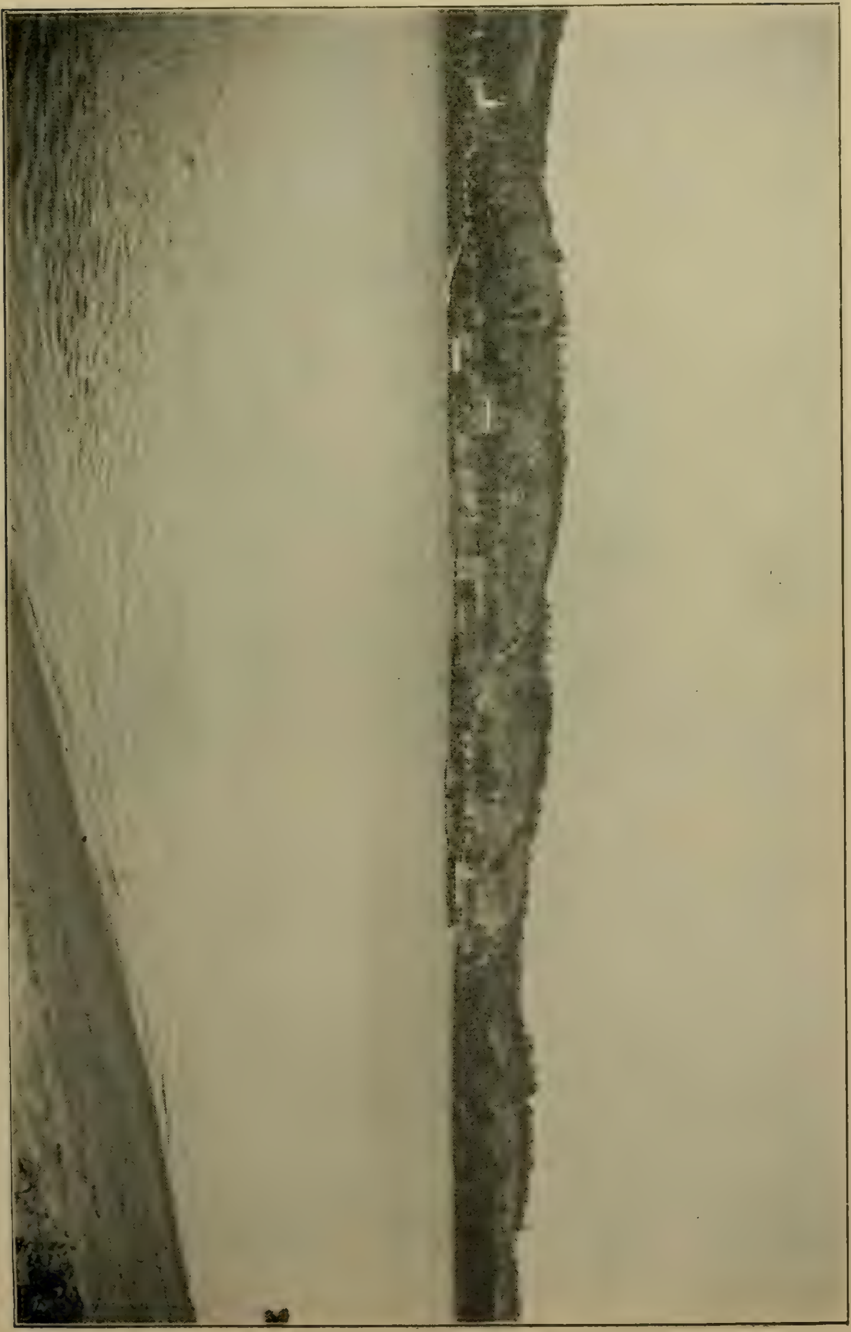
We passed Cassville in a few days and the mouth of the Turkey River a mile above, where we found many birds. Still on we went above Guttenberg, another German town, and nearly opposite the little town of Glen Haven there is an island on the west side along the point of which, in its upper end, nearly all the river boats have to pass in low water, and here we stopped a day or two to hunt out the island. We knew next to nothing about the channels for river boats at that time and while landed here there came down around the point a big river boat which



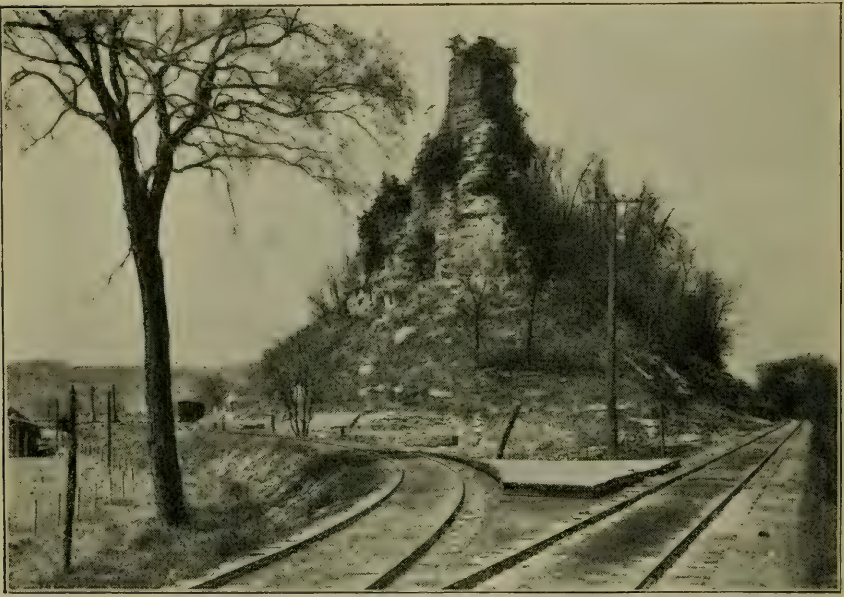
Eagle Point, Above Dubuque.

passed so close to our vessel that it nearly submerged it, throwing the waves all over it, throwing it upon the shore and nearly overturning it, falling back at last into the trough of the sea which the great ship had scooped out. The captain of the vessel hailed us as he passed and said we were in the most dangerous part of the river possible, that the boats had to make that sudden turn in low water and were unable to give us any warning, and that to save our lives and property we ought to move away, which we soon did. East of this there are two islands, one of which comes up from opposite Guttenberg and is divided by a narrow passage from the island that flanks Glen Haven on the north, and here in this channel we landed and were sleep-

Broken Bridge at Eagle Point above Dubuque.



Cassville, Wis.

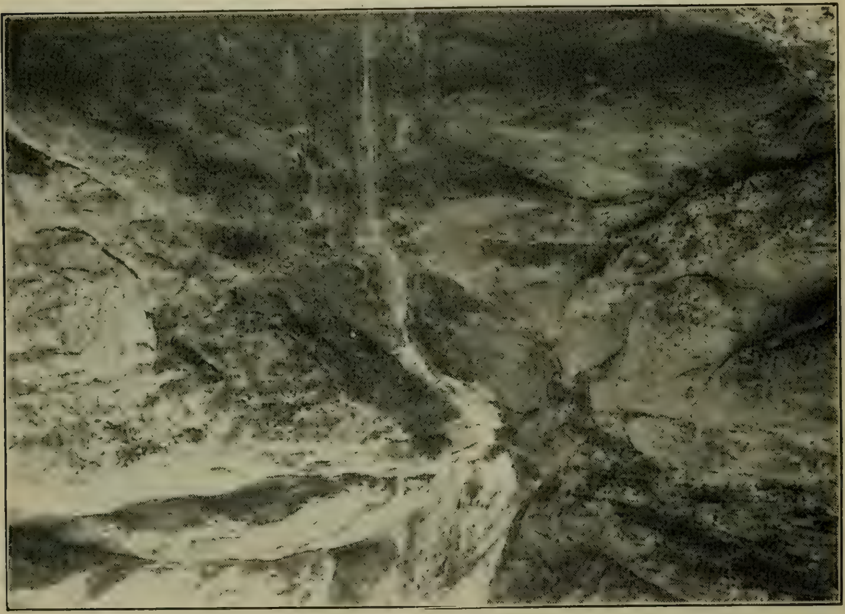


Turkey River Above the Mouth.

ing quietly in the night when a huge boat came up from below, attempted to land, and caught into our skiff, which was tied to the end of the boat, and it got so mixed up with it that the captain, coming forward and seeing the trouble, backed out into the river again and went on his way. In the morning we came near getting into a trouble with the men on the landing, for it turned out that this was a woodyard where the boat got its supplies and we were blamed for not permitting it to land. At this point James Joles killed forty birds in one day on the lower island not far away, and this was the first big shot that anyone at that time had made. We put out our tent on the channel between the islands and many of us slept ashore there while we stayed. One night, coming in, I was shown two or three monstrous rattlers which the boys had killed that day. We were now taking it quite easily, some of the hunters had left us, and we did not retain over half of the number that shipped with us. The few that remained did better, and the weather began to be cool and bracing. We shipped a number of boxes from Guttenberg near by, then passed on upwards to Prairie Du Chien and McGregor. South of McGregor half a mile there is a small bay running up from the river between two cliffs on the mountain side, where a little flat sets in, and by it, on the water's edge, there was then a fine spring which was so enticing we remained there some days. Across the river at this point, a little lower down, was the mouth of the Wisconsin and there was much good hunting ground adjacent. This open ground where we landed covered half an acre or more, and the cows would come along down from town pasturing here as they went and loth to leave on their

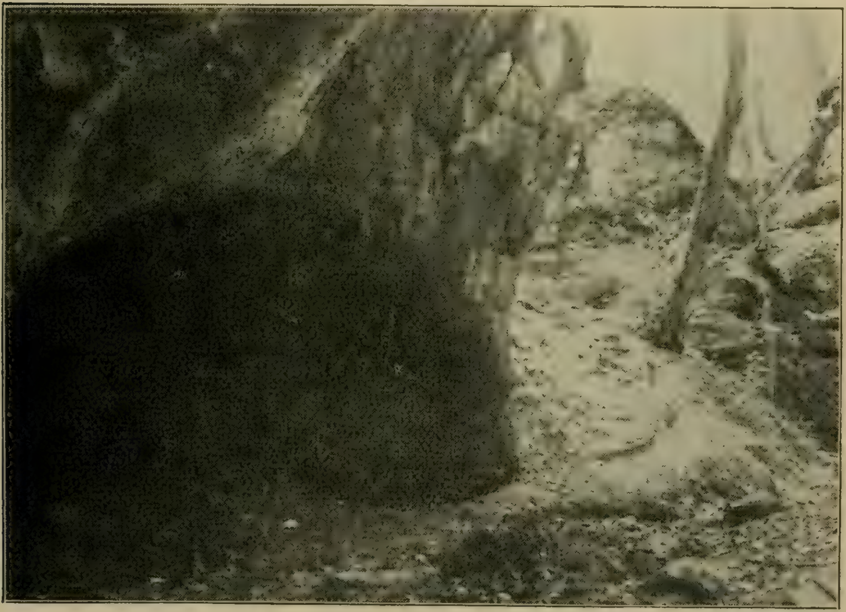
Railroad Bridge and Wisconsin River.

journey among the hills that flanked the sides of the bay, and at night returning with full udders they wended their way slowly along or rested awhile. The boys soon enough discovered that this was their dairy, and penning up those that would not stop themselves they drew therefrom bountiful streams that went to modify their Rio. One evening Charlie Collins, who always had a penchant for getting up high and coming down low, climbed up this lofty hilltop, and to show he was there and make a great noise began throwing down the biggest stones he could find, roaring and tumbling like a volcano, and Ike, who was intent on getting the lacteal fluid and had his cow penned up against the steep hill side, was too mad for quiet when this downpour of rock



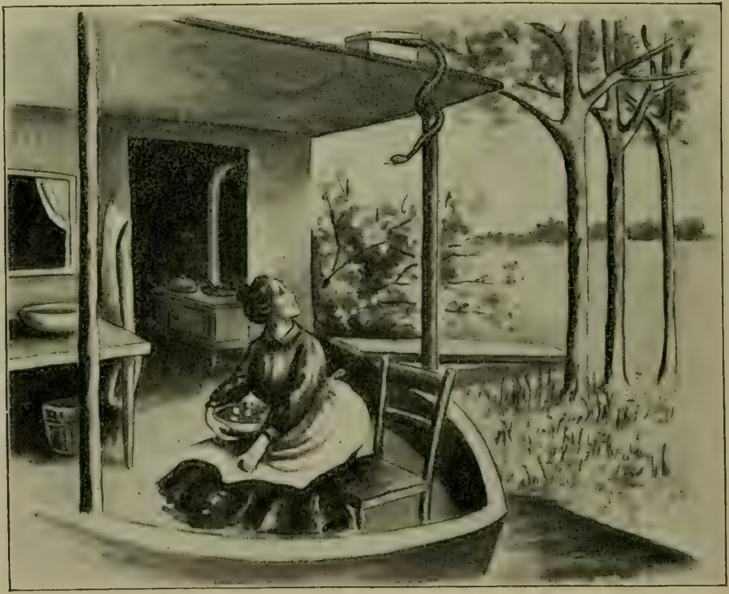
Pictured Rocks Below McGregor.

was precipitated upon the land, which disturbed muley so much that she kicked over his pail and gave Ike some pains in the sublateral region, which created much merriment. Ike tried it again with no better success, when he halloed up to Collins to quit his d——d monkeying or he would come up there and kill him. As he and Charles were always in a quarrel it began to smell around there something like the flavor of brimstone till Charlie came down with his usual apology, laughed loudly, in which Ike joined him and it was all blown over. The crowd chaffed Ike a great deal about this occurrence, but the rest of the crew bore the loss bravely which the destruction of the milk brought them. While we were there one morning there was a slight noise



Pretty Cave Below McGregor.

upon the roof of the boat, and looking out we discovered a rattler sliding along down but giving no warning of his presence till he landed on the bow, and Mrs. M. was so frightened she ordered Ike to kill it immediately, which he did. It turned out that Ike, on going to a spring to drink before he landed here, had heard the familiar sound of a rattler close by, and getting a box had put the reptile therein, after pulling out his fangs, as he said he did. If so, they had grown out again in the short time he had been on the boat, and Ike was warned not to repeat the performance.



A rattler whose room was better than his company.

Guttenberg is quite an industrious, thriving German town, and as one of the leading citizens there was named Crawford, I always thought of the noted novelist of that name when I visited it. Glen Haven, on the east side, is also a small German town, and the only man who seemed to possess any skill was a watch maker and he could do almost any kind of work on machinery to perfection, and fixed up any breakage we might have many times. We stayed one day at Prairie Du Chien and passed up the river on that side. Across on the island was an Indian camp, whither Mrs. M. was very anxious to go and visit. As she had our dog with her the bucks were very anxious to secure it, which they claimed would be "good eat" when he became fat, and fat dogs are their specialty. With plenty of green corn in the summer, which they appropriate from the growing crops of the farmers near at hand, and the muskrats,

Looking from Pike's Peak Towards Wisconsin River.

which they take at all times of the year and which form their staple meat, they manufacture succotash in the summer in the Indian style, which is kept cooking constantly in a large iron kettle over the fire, the women doing the work and the bucks mostly asleep. Their filth does not seem to destroy their life or make their morals any worse, neither are they shy at begging. From Prairie Du Chien we passed up to Lansing, shooting over the intermediate ground, and on beyond Lynxville, and a few miles farther up we stayed several days, not going as far as DeSoto, but nearer the opposite shore. The birds did not seem to be very plenty here; it was very dry, and they seemed to have left

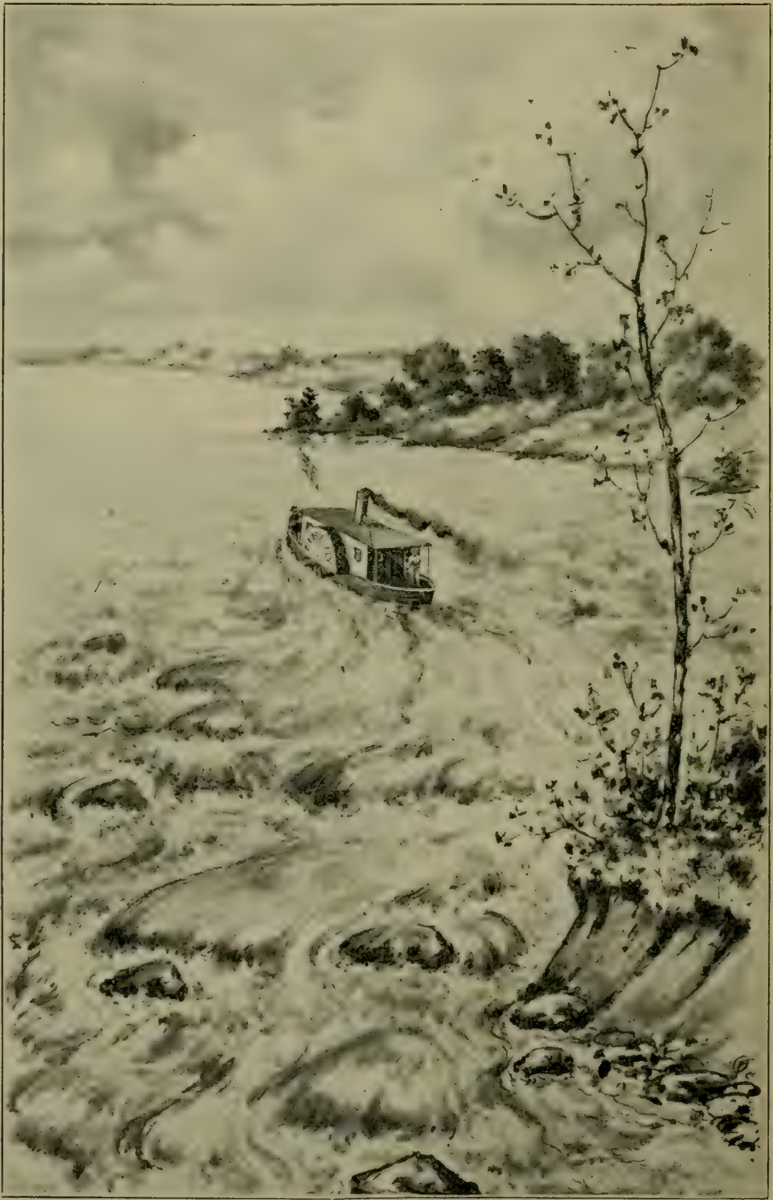
North McGregor Point.

the wooded beds and dry valleys and gone into very thick cover. Not a track of any living being was to be seen in the bottoms across from Lynxville, except occasionally the barefoot track of an Indian. This was fine ground for birds, plenty of cool, shady places and little draws where we usually found them, and we did not kill more than eight or ten birds a day each. We started to work down the river again and we had not gone very far before one of our flues gave out and the smoke and heat all escaped up the smoke stack and we were where we could not repair it short of McGregor, therefore we pushed out into the stream and allowed the boat to float down sideways, as the waters carried it, only working with our skiffs alongside to keep the boat

South McGregor.

from swinging and to pull it out of the channel in case a big boat should find us in their way. We were now reduced to four or five men and Seyberts was in the skiff and Collins was back of the boat doing some mending. Ike, with his usual devilishness, began to row with one oar, the outside one, of which there was no need whatever, and as if by mistake he skipped the blade of the oar over the top of the water in a kind of skimming fashion, and by so doing threw a large amount of water into Collins' face and lap. Ike apologized slightly but in a few minutes repeated the mistake. Collins began to get angry and he told Ike that if he did that again he would come down into the skiff and throw him into the river. The wetting continued, and Charlie said to O'Brien to turn the prow of the boat around towards the shore, that they were going ashore and Ike and he were going to fight it out. Johnny turned the boat point forward to the shore and he and all aboard was laughing at the fun that was in store. I was on the shore at that time, running along through the brush, hunting as I went and keeping easily abreast of the boat, which had nothing to propel it but the waves, and looking out occasionally through the bushes, I saw the boat heading towards me, apparently as if to land. Those that were on the boat were setting up a great glee at the prospect of the fight, and the champions stood with knitted brows glaring at each other as the boat was about to land. I supposed it was landing to take me on. I made towards the boat as it struck the shore. The champions stood a while as if undecided what to do, and the crew meanwhile poking fun at them and daring them to fight, till Charlie began to laugh, when the whole thing fell through, the boat shoved out into the stream again, and no blood came from either of them.

We went over to North McGregor and had our flue repaired on Sunday, at the elevator, and Monday we descended to Turkey River, just above Cassville. This is a bottom of heavy timber on both sides for a mile or more back from the main river. I was on the south side of the stream, hunting away with very fair success in the afternoon, when it began to grow dark more suddenly than I expected. The day seemed to shorten up and the hills in the west threw a dark mantle over the valley. Night was coming on unmistakably and I left for the river bank where the boat lay. Collins had come in for the same cause as myself, with the additional one, as he explained, that he was "all fired up" with the mosquitoes which attacked his neck and face without mercy. I had put on a preparation, so they hurt me but very little, while his neck and ears were red and swollen. After getting our meal the darkness began to fade away and the light to strengthen, and shortly the sun broke out into the sky and it was only three or four o'clock. It was an eclipse of the sun. The fowls began to crow in the farmyard as though another day was approaching, and we slept the rest of that day. We stopped at Cassville and it was getting cold now, along the first of October. Our landing for several days was opposite the governor's house, and his wife frequently came out to see us. Our little boys ferried me across the river every day, and over against the bluff side the shooting was good. Later we passed below Jack O and into the Milk Slough again, staying a few days and returned to Cassville to ship. As we started to leave the slough we perceived a lot of bark piled up near the shore and before we left we filled our boat with it for fire and steam, as it took no labor to prepare it. We started out just before dark and had gotten fairly in the river when it began to rain. The winds blew and beat upon us and our motion was slow and heavy, but our bark fire was a terrible disappointment as it made little steam and we were hours working up against Buena Vista till we got in the channel between Jack O and the east shore, without which we would never have seen the city that night. It was so dark between the shore and the island that much of the time we had to guess our way, and running close to the island to avoid heavy seas, we encountered tree tops innumerable that had fallen over into the river, and often we had to back out to save our smoke stack. It was midnight when we landed at Cassville again and in the morning the boys of the town reported another ship had come in during the night, and the Governor's wife came out to see if it was so. "What boat is that came in last night?" she said, and down she came and talked awhile with us very pleasantly. Our crew was reduced to only one man, Collins and myself, and we found a good many birds for the middle of October. While we were there it froze very hard one night. The boys had picked up some small turtles which they kept in a pan to look at; not over two or three inches across their backs, spotted and with little short tails; they were quite an attraction. We had planned to take them with us when we went home, but the cold was so intense that night that it froze ice over in the pails and our little guests were cooked in the morning dead. We pulled down the river again the last week of October, Mrs. M. firing the boat and Collins at the rudder. Three or four miles above Dubuque we landed on the west shore where there were some bottom lands, and it was cloudy and foggy from the cold the night previous. We did not stop over an hour, and I picked up my gun while dinner was getting ready. In that time I raised seven partridges, and killed six of them, the one that escaped not coming up within reach. Before dark we were below Dubuque at the east shore opposite the point of the first island you meet. Here were a few cottonwoods on the shore, while on the island a lumber fleet had put in and tied up for the night, and the wind rocked out little vessel like a cradle till the morning appeared again. We reached LeClaire just before night the following day and we prepared to run the rapids. There was a comparatively narrow channel where it was safe for big boats to go, but they seldom ventured out before morning, laying by at LeClaire. We did not know this channel, and when we entered the current the great momentum of the flood from above struck us, and we went with a plunge down the incline. The helmsman could hardly keep on his feet, and the mad rush of the waters made one dizzy to look overboard, as it would from a high tower. We looked at one another with astonishment, the voice semed to freeze to our lips, and every lurch of the vessel seemed to send a thrill into our veins, and we could only meditate rapidly as we would when going over an abyss. For a moment we would glance at the waters, hoping that the prow would not meet an obstruction and turn the boat against the current, in which case we would have been swamped in an instant and the craft sunk to the bottom, but it bowled on. No one had advice to give, or, if given, it would have passed unheeded, and the awe of the moment crept over us. We felt we were pygmies in a boisterous flood that was sweeping us madly on to eternity. We probably had descended a quarter of a mile, hoping and waiting, with our feet braced against the bottom



The Boat That Was Founded on a Rock.

of the boat, when every jar tortured us like a knife thrust through our bodies, and the speed of the vessel mounting up, as it seemed, to a mile in a minute, the water swirling against the sides and licking up the bubbles that burst from the eddies or broke into rainbows far down the channel. All at once the boat struck something, a hidden rock, over which it grazed a moment, then whirled to the left with the speed of lightning and vaulted out of the trough of the sea over the obstruction and swinging around threw the boat crossways of the channel, and landed us dry upon a long, flat rock, against which the waves pelted and dashed pitifully. This was done so quickly, I hardly had time to take breath, or even to look after the family, which, for an instant, thought death was upon them. As the speed stopped and the boat rested easily we regained our senses and began examining what sort of a place we were in. The water was not over a foot deep on the flat rock which extended the length of the boat, and we found that the boat, once on, could not get off, as the flood drove it farther on and the rise of the rock prevented it from going over. We were not ten feet east of the main channel. A few feet further west we would have passed over safely. It was now getting dark and no help could be had from any quarter. We were half a mile from any land and we were regaled with the wild music of the winds as it rushed through the rigging. I quieted the family as well as I could and assured them we could not possibly be carried away. I lay down and slept well, but their sleep was badly broken, if they had any at all. In the morning we could see better. On the east shore was a small hamlet, Rapids City, and we got out our skiff to go there for assistance, when a boat left that shore carrying two men, who soon came to us and told us what to do to escape. We had not power enough to breast the current, even where we were with the water shallow, so they ordered us to steam up while they got a line in front of the boat with their skiff, and as the steam raised the combined power of the two carried us forward, past and around this rocky headland and into the channel again. We saluted our helpers, waved our hands at them, and rolled on again down the fierce current, following the instructions which were given us, and in due time we passed the whole length of the rapids, passed the Big Bridge, unloaded the family, and ran the boat down the island below Davenport, where, with a nice anchorage, we tied up the vessel for the winter. In this trip we killed and shipped fifteen hundred pairs of woodcocks.

THE FIREFLY GOES DOWN THE TENNESSEE RIVER FOR WINTER OF 1869.

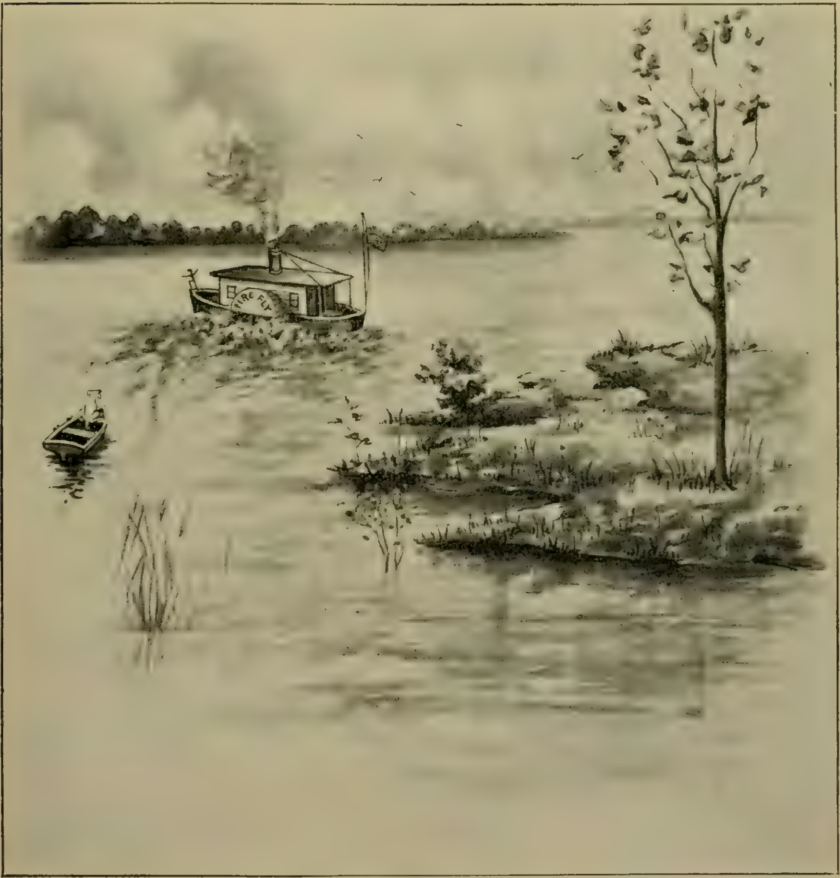
The following summer birds were low during July and August, down to fifty cents per pair, and we did not move the Firefly. In the Fall a party came and wanted to hire it for the winter, saying they were going down on the Tennessee River to hunt ducks, and I let them have it. They went down around Memphis and attempted to return in the Spring, and they got as far back as Point Pleasant, in Missouri, when they abandoned the boat. I took two men, Collins and Charles Beach, from Davenport, and we went down and brought it back as far as St. Louis, which point we could not pass on account of the swift water, but as there was a vessel there about to depart up the river, we secured transportation for all of us to our railroad station, and Mr. Beach and the Firefly to Davenport, for One Hundred Dollars, and the above named Beach contracted to run us up the river again in July, 1870. We went up there much as we did the year before, and we spent most of the time between Dubuque and LaCrosse, running up awhile into Root River, where Kindred found so many birds four years before. We had a small crew, not over four or five persons, and my family did not go. As the birds got thinner along in the summer, Collins and Beach took a run out on the railroad to Cresco, Iowa, where they found a great many chickens, and I went with them, leaving the boat in the meanwhile with Barton and the boys at McGregor, from which point, when they got through, they ran the boat down to Garden Plain, a few miles below Rock Rapids. The weather was cold when we first commenced to hunt chickens, the first of September, as low as 40 F. in the morning, and we thought our birds would keep till we got a box, but it grew warmer. We had no ice and the birds, apparently sound when they were shipped, arrived in New York in very bad order, so much so we got very little for them. Then we abandoned shipping and went to storing the balance of the month, and I became acquainted with a baggage man at Prairie Du Chien, Charles Stannard by name, who was one of those happy souls not often met with, ever ready to help anybody, oftentimes even at a loss to himself. I had shipped so many boxes at his station, he came to know me, and when I asked him if I could pack my birds in his ice house, a few rods distant, he readily consented, and there I placed all my birds from Cresco for about three weeks, going down myself and packing them away. After a time Mr. Stannard said I need not come down if I would tell him how to pack, and he packed all my birds afterwards till the first week in October, when I left

Cresco for the season. I found the birds all packed away under a foot of cold sawdust and resting squarely on the ice, breasts down, when I dug them out and shipped them. Of course, they were pretty dirty with the sawdust and the earlier birds were somewhat sour from laying so long, but they were all salable. I wanted some money on them before I went home, and I asked Mr. Stannard to go with me to the bank to make a draft against the birds, and he said he would. I visited him at his home in South Prairie Du Chien, where he had a handsome residence, secured a hundred and thirty-five dollars, thanked him as well as I could, for which he would take no remuneration, and when the birds arrived in New York they were sold for about one dollar per pair, and the draft paid. Sumner was very sorry because I did not send the shipment to him, and said the birds were worth $1.12½ if not $1.25 per pair, as they were very much wanted and he did not get near enough. Mr. Stannard died several years ago, but I never saw him again after that season.

In 1871 a new crew wanted to go up the River. We took on the Ogdens, William Morris, John Barton and W. E. Bailey. They ran the boat up to the neighborhood of Savannah, and there in the latter part of June they began to gather in birds. I had them sent to Atkinson and put in our freezer, which we brought from Sandusky City. About the first of July my family and myself joined them again at Savannah and we passed another summer up the River, or until Sept. 1st. From Prairie du Chien up to the neighborhood of De Soto we spent most of our two months. On our way we landed at our famous camping ground below McGregor and were sorry to find that the new railroad on the west side had entirely obliterated our spring. We were opposite the Wisconsin River and we made up our minds to go there and we did so, going as far up as Bridgeport or a little higher. Here also was a long bridge across the River and the Indians were encamped all around it. They followed us about every day, begging for anything we had until one day we gave them a small catfish which lay in the bottom of our skiff, pretty well perished. They were pleased with it but they came no more to our boat, though they followed me all around the woods, begging my birds, for which they had no use whatever, and I drove them away. We found birds not very plenty but found plenty of cool, flowing springs and we made the most of them. Then we descended to the Mississippi again, passed up the river, leaving Prairie du Chien well along in the afternoon. A storm seemed to be coming up and we followed up the East side of the island opposite and the tempest seemed to increase and threaten. As it roared louder we hugged the shore till we passed the point beyond which for half a mile or more we had to cross the channel on the West side. We had not gone far when the rain began to come down and the wind to blow with increasing force, but the lee of the mountain was before us, and the waves did not run very high to overflow us. We crowded on all the steam we could and just as we reached the embrace of the shore the thunders rolled over the hilltops, the waves reaching us and breaking against the sides of the boat and upon the land like the burst of desolation, and nearly engulfed us as we struck the shore. Barton and Collins jumped out, grasped the rope quickly, drew it around some saplings on the shore and held it taut till the fury of the storm had abated. If we had been ten minutes later getting in a total shipwreck would have been unavoidable. The mountain towered up at a great height and warded off the destruction which was imminent,

WE LAND JUST BELOW DE SOTO AND HAVE FINE SUCCESS—BOAT GETS LOOSE WITH THE DOG.

At Prairie du Chien the ferry boat was thrown high and dry upon the shore and much property went without price in this disaster of wind and rain. We continued our journey up past Lansing and were in sight of this place when I missed my dog. Looking about for the skiff which was usually fastened to the stern of our vessel we found that also was gone, and lo, and behold, on casting our eyes down the River we saw it had broken loose and was drifting downwards probably forty rods away, and in it sat Ponto, looking wistfully forward to us and surveying the gap which widened rapidly between us. If he could have reached us by jumping out of the boat he would have done so. We turned round, overtook the skiff and took the poor fellow in, and there was great joy and a good laugh at Ponto's expense. From Lansing we passed out along the East side, keeping with the channel, and eventually reached a mile or two below De Soto, a short distance from the end of the timber as it reaches the prairie. Here the shooting was remarkably good. I hunted on the side of the River by the boat; Barton and the other boys crossed over to the other. Mrs. M. was somewhat disturbed by the Indians, who came along every day in their skiffs, stopping and begging for meat, and she had to use all her diplomacy to keep them off the boat, as they were hungry thieves and would ask only for what they could not get otherwise. She put them off by telling them we were short of provisions. Had they known we were so far away there is no



The Dog Loose and Lost in Sight.

telling what they might have done, but she gave them no clue where we were. They were dirty, vulgar and immodest, and if they were children of

Nature, they were spoiled children. One fellow came along in his skiff alone, sitting bolt upright and paddling from the rear, with only one piece of covering on his person, and that a straw hat. He presented a very artistic pose, and Mrs. M. thought he would suit an artist if his picture was well finished.

My family now thought of returning home. It was near September anl the boys were unwilling to leave, but I promised them they could have the boat again after we had gone. We got off at Prairie du Chien, whence my family and self returned home. The last day the boys went across the River up where they were camped. They did not return till very late, not before nine o'clock in the evening, and they had to make their way slowly through the bushes and they were lost part of the time. When they came in they were loaded with birds. Barton had killed forty woodcocks and the rest did proportionately well. Barton was the banner hunter all the season. As we were coming down to Prairie du Chien we counted up his dues, out of which his expenses were to come for boarding him and ammunition, and we found since he came on the boat the last of June he had to his credit two hundred and forty dollars, which I paid him then and there all in a lump. As Bailey was now able to manage the boat he took it and returned with the Bartons to the same ground and all did well. Birds were high this season and most of them brought $1.25 per pair, and the last went to Sumner. After my family got home I returned up the River again as far as McGregor and went on to Cresco. I hired a one-horse buggy with sufficient room in the back of it to hold one hundred pounds of ice and I began business the first day of

September. I went back into the country ten or twelve miles and I averaged over fifty chickens a day till I could get some hunters to help me. I shipped a box every three days. I repacked my ice when I arrived out in a big dry goods box, putting it in the center and underneath it a large lot of hay or straw, then I put on a layer of sawdust, over this the ice, then another layer of sawdust, and filled the box up with dry hay packed closely around. The first night I uncovered the ice from the top, except a thin layer of sawdust which I allowed to remain. Then I took the day's birds and laid them, breast down and drawn, on top, covering them with hay tightly again, putting on the lid so the flies could not reach the game. The second day I used what ice space was left in the same manner, the third I took the ice all out, putting the cooled birds on the bottom, ice on top of them and fresh birds on top again. By this means I had the whole mass cooled by the third morning when I went to town, killing a couple of dozen or so on the road as I went and knowing I could not ship until afternoon. I had them all packed and delivered and I was on my way back again by dark. When some help came in a few days we found chickens so plenty we increased our force to seven or eight men. The weather was now getting cooler and prices stiffer till in a few days they reached $1.25 per pair, selling them as they run young and old by the barrel, dividing our birds up between Mr. Lyon and Mr. Sumner. Soon we crowded the market a little too fast and prices fell off to $1.00, and by the end of September to seventy-five cents, at which price we sold but few, packing them away in New York until prices recovered again, when we sold out. The fifth of October we came home. I paid up the hunters all that was due them, and had five hundred dollars stuffed down my bootleg, with quite a lot of birds yet to market. Gathering up the remaining woodcock from the boat we had splendid success all that summer. We shipped four hundred dozen chickens from Cresco and lost only seven birds, and between twenty and twenty-five hundred woodcock, none of which sold below a dollar.

John Barton, who accompanied us on this trip, was a remarkable hunter. He was an enthusiast in sport and barring his vices, which wrought him more injury than anybody else, he was an agreeable companion, inclined for fun and mirth on every occasion, and no sign of laziness or weariness about him. He always said he did not care how hard he worked, just so he had "a devil of a good time afterward." After a hard tramp in which few could keep up with him he would not complain if his supper was not ready, not even if he had to get it himself. He had some fantastic names which he applied to men and things, and his epithets were often so grotesque and ludicrous that the appellations vividly remained to vex the victim or to call up new associations of familiar objects which gave you new interest in them. He felt carefully over the bumps of men, not by hand, but by intuition, interpreted their peculiarities, and then he named them, not viciously nor with any sign of a sting, but they were there to stay. Not one who ever knew him will forget his Gil-a-lu bird, a diminutive species of bittern not bigger than a snipe, which rises up out of the marsh, dangling his legs like a jumping jack until he gets a good start and then throwing them out behind him, drops down into water or bog again. All the books of ornithology could not displace that name. It was so with men. It was so with things he handled, with his gun, with his dishes at table, with the back fields which he inspected or the sloughs which he crossed. He gave them all a name as he liked and they were not inapt nor hard to remember. He was a man of large physique, he was built for hard labor without weariness. He took long strides when he was walking. His shoulders were bent by looking at the earth too long and too carefully, and he always reminded me in his swinging gait of Dr. Johnson. There was no doubt he had a mind of great calibre if he had chosen to use it before vice and passion had made inroads upon him, but he was now at the height of physical prowess. He seldom failed to bring down his bird under most unfavorable circumstances, as his count showed at the end of the season when he eclipsed all others, but in thirty days after he left the River he was a bankrupt and except the small amount of thirty dollars which he had become indebted for in the spring, and which he now paid, he had not a dollar remaining the first of November. Gambling and drinking did their work and did it well. In the spring following he was down on the Edwards River to hunt snipe as usual and I was so delighted with his efficiency the past season that I went down to see him, but the bow so long bent was now broken. He could scarcely kill a snipe at all, where a greenhorn would have taken them easily. The snipe would rise in its quiet way, giving its familiar sound and seeming to say, "'Tis John, 'tis John, 'tis he, 'tis John!" Bang would go his gun and away would go his bird. He was now shooting in the open field, the easiest of all shooting, whereas last year he shot through the roughest of cover where a glimpse of a bird many times was all you could get, and he was master. Now the penalties of dissipation were upon him. His muscles refused to act with that promptness and correctness which gave success. I saw no more of him after that year, but several boxes of woodcock came from him from Bellevue, Iowa, years later, and he married soon after at Hanover, Illinois. His wife died in 1883 and since then I am told he has loitered around Galena Junction, fishing some and hunting some, but always the victim of bad habits.

Of William Morris a few words will suffice. He was not born tired or lazy, but while with us he exhibited no weariness for he did not work hard enough to induce it. He would forage around an hour or so in the morning, kill eight or ten birds, then retire to the boat the rest of the day perhaps to fish, perhaps to dream. He was a good shot and had long been known for his superior marksmanship. I do not think he cared much for money or what it would bring so he had a good time, and this he had without limit. Fishing, hunting or trapping suited him equally well. His shanty on the big slough northeast of Geneseo not far from the Deacon Kemis place, was a model of a backwoodsman's outfit. Traps and guns and skins of furred animals made his place outdo a second-hand store, and the odor that surrounded him was a mixed quantity between a decaying fishhead and an evaporating skunk skin. He was not vicious and he was liable to immortality from the many victims that left their malodorous breath behind them. He had the same advantage in hunting as Barton had, yet he only earned fifty dollars while Barton earned five times that much. He was equally as good a shot as Barton, and I believe was equally good as any of the many sportsmen which this country has brought to notice, but the motive power was sadly lacking and he took no trouble about it for he had a good time without much labor. His fish pole was always hanging from the boat and many a good catch he made, and many a good meal he shared with us. He was ready to help anywhere he was needed and he was singularly free from all forms of vice.

Of the remaining members of the party who accompanied the boat, first and last, I will now speak. Billy Ogden was accounted as fine a shot as we had on the boat, but he resembled William Morris in his lack of energy and when he killed half a dozen or dozen birds he went back to the boat to rest or sleep. Many days he rolled himself up and lay in the sun when the shooting was fine. His brother Marion was the only one who could rouse him up, and it mattered little to him what the business in hand was. I think he would as soon have gambled with a man and got his money by unfair play, or thrown a railroad train from the track for plunder, if Marion had told him to do so, as he would have gone out to hunt with him, and yet his nature was quiet. He was not a drinker. If he indulged at all it was more to please somebody else than himself. He seemed to have no obstructive morals. He was fortified with no sense of obligation. He thought he was a child in mental strength and he weighed things as a child. He had all the physical handicraft which a man uses and that was enough, and he punished a man hard who picked a quarrel with him. He moved to Narka, Kan., many years ago and was in durance vile, afterwards released, and at the last report was a settled barber there.

Marion Ogden, the brother, was a man of noble physique and he had all the dash and daring of a man of the road. He never knew when he was whipped and if he had happened to have lived at the time of the buccaneers on the Spanish Main, he would have done that cause ample justice. He was quite young when I first knew him and I found him an adept in all the artifices which men employ to avoid labor. In Atkinson, where he was brought up, he heard nothing but oaths in his father's family, and Tom Nowers used to say he did not understand how the Ogdens could always dress well, better than he, and do nothing. When he did work on the boat he worked hard, and he early learned most of the secrets which hunters successfully employ in capturing every kind of game bird, and the bag which he brought in was always large and he did not waste much time in dawdling around and in sleep, but woe to that man who stirred up a fuss with him. He expected you to be honest with him but he did not court honesty himself. If you suggested fight with him for a settlement he accepted it readily, for he knew he was master in that kind of craft. He always carried his pistol, which he called his gun, and if he could not enforce his contentions one way he would do it another. He was specious in modes of expression, calculated to minimize and discharge undesirable questions. His morals, if he had any, were corralled with great severity. His vices exercised the right of eminent domain. If he had come into authority any time in his life he would have pushed in with unmitigated vigor. If he had been a Roman general he would have put his enemies to the sword or to the cross. He would stand unflinchingly before any weight of evidence until he was absolutely bowled down. When he left the River he moved to Nebraska and we commenced buying game there, and he furnished a large amount in 1877 and 1880. He was near Hastings at that time and the grass plover were very plenty there those days. The large summer kind were particularly so, and he killed sometimes one hundred birds in a day in August and as high as forty chickens a day in October and November. Later years he was about Burwell, but his evil habits forbade his staying long in one place, and I have not heard from him for several years.

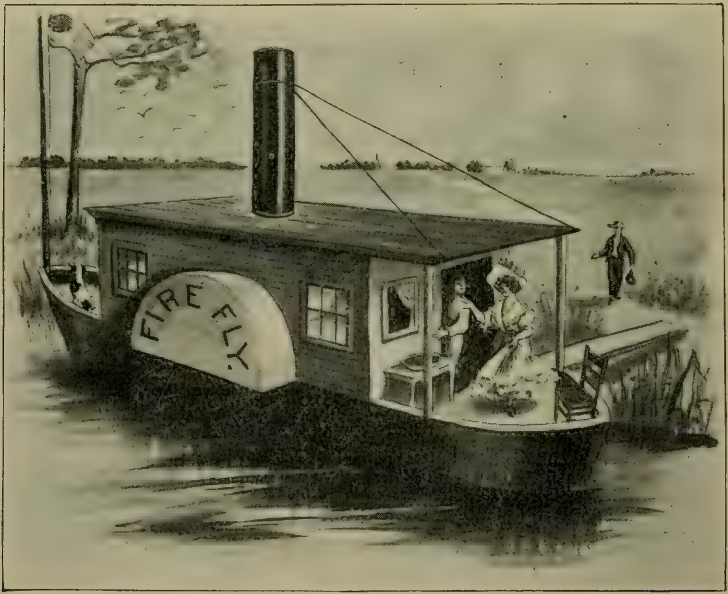
ORM BROWN, IKE SEYBERT AND JOHNNY O'BRIEN.

Mr. Orm Brown associated with us only one year on the boat, and he could not make it profitable. He was very popular with all the crew, and the old song he used to sing so often of the

"Three crows that sat on a tree
And were as black as black could be,"

will always give him a place in our memory. And Johnny O'Brien was as fine a young man as you need ever to see. He was a full blooded Catholic and one Sunday night while we stayed at Guttenberg there was a great dance going on there and annoyed us who were trying to sleep. In the morning Mrs. M. remarked in his presence, not knowing what his religious views were, that they must be all Catholics for they didn't care anything about Sunday. She knocked the props out from under Johnny at once and he was on his feet in an instant. "Yes, they do," he says, "they think everything of Sunday," and Mrs. M. only escaped a scene by saying they were probably Dutch Catholics. Johnny did everything on the boat we asked him and stayed by us till the last. He had the asthma very bad, and like Brown he had to go West or Southwest to escape its terrors, and recovered from it as long as he was away.

I have to record something of the creature who was commonly called Ike Seybert. He was engineer most of the time with us but I think he knew little or nothing of the office when he commenced. He was constantly screwing up the bolts on the engine and on the eccentrics and it cost us much expense to repair the breaks which he made, beside the valuable time which went to waste. He was unclean and repulsive, quick to perceive and prompt to embrace all the seductions of sensuality. I could excuse him somewhat for mocking a preacher in his nasal twang and intonations, for the resemblance was almost perfect, but when I found him bringing a demi-monde on the boat my patience was exhausted and I walked her out and ordered him to



A Gay Bird Not on the List.

follow. To revenge himself after getting off at Prairie Du Chien and accepting my note for what was due him to be paid on the first trip down, and for which I left the money when I came but which the note therefor was not obtainable, he afterwards sold the note to the Ogdens. They brought the same and sold it in this city, but the buyer on a statement of the facts refused to collect and lost what he had paid for it. There was nothing on the street too vile for him. He was last heard of in Ottumwa, Iowa.

The year 1872 was one long to be remembered, for it was fertile with disaster. We sent R. E. Bailey to manage the boat which had been left over at North McGregor, and it was managed well enough, but birds seemed to have slacked up in numbers and prices were not so good. I had determined to put up a freezer in Cresco and through July and August was building it. I got it completed before the middle of August when the chickens were ready to be put into it and I supposed I had ice enough to run it. They came in so fast, however, that I could not freeze all of them at once and was forced to ship when prices were low and the weather was very hot. I had no time to go into the field myself and all my receipts were purchased. When I got reports of the first shipment they went through in bad order, not bringing me one-half of what I paid for them, and I stopped shipping and attempted to hold them in the freezer. We had three rooms, and on charging them all we found we would not have ice enough to run them very long and we began to practice economy, at the same time taking everything that came in. Here was our fatal mistake. If we had limited our purchases instead of the ice we used and frozen everything we did take in down solid and kept them so we should have worked through all right, but when the birds barely froze a little and then were packed together to make room for more, it softened the whole lot, which in time began to show decay, and birds when once softened cannot ever again be brought back as good as they were. By September 1st when birds were getting nearly grown we had several thousand young and immature birds which no one seemed to want in market and which was just opposite of what we had expected, and these not keeping just right left us in a precarious position. In this extremity I had a car of ice shipped in from McGregor but that did not last long, and now when the birds were getting large enough to be in demand we stopped buying. The 20th of September I returned home, leaving everything in the hands of R. E. Bailey. It was getting colder and birds began to be wanted in New York. I had reports from Bailey about every day who said everything was all right. I advised him to ship a few boxes to see how they would sell. After he had started one box or two he continued shipping and no reports came to me only in a roundabout way through his hands. In the meantime the whole line of railway between Cresco and New York was showering down new shipments upon that devoted city, where after the dealers had received one box they refused to take more, and most of them were partly lost or entirely so, and the freight and express bills were returned to me to pay, for which I forwarded over one hundred dollars and did not receive a cent value therefor. I stopped Bailey's shipping as soon as I could telegraph. In the meantime he continued writing me the birds were all right. I ordered him to send me a box by express to Kewanee so I could see what they were, and on receiving the same, notified him that they were all worthless, dismissed him from my service and put further operations in the hands of a colored man who seemed to show a great deal of aptness for taking care of the house. Mr. Bailey came home a few days afterwards and I showed him the birds were spoiled, being sticky and soft. He said he was sick soon after I left and had not been able to attend to the business as he liked, putting the job in the hands of the colored man before mentioned.

SHIPS THE FREEZING PLANT AT CRESCO TO KEWANEE.

In time I had the freezer emptied of all the birds it contained out on the prairie, gave a man forty dollars the following year to tear out the piping of the freezer, load it and send it to me, and the banker where I did business sold the building for me. When the car arrived Mr. Kerr, who was agent here, reported that there was a carload of stuff at the railroad billed to me which he said looked to him like old iron, and asking me about it, said he did not believe I had ordered it, that it did not look to him to be worth the freight. However, I unloaded it, and that metal was in a large measure the material which entered in to make our future freezer, for all further business twenty years afterwards. Much of this damage came from the hunters carrying out with them insufficient ice, but more from laying down their birds in the field when they got a little heavy, where the flies stung them. When I shot all the birds myself, or at least examined them every night as they came in and packed them, I kept them in perfect condition, but they came in often at night when I could not tell exactly what state they were in, and here the loss largely occurred. I never went back to Iowa but once, and that was the year 1873, the year of the panic. This year also prices were low, but I bought low and examined thoroughly what I bought and had them well frozen, for I had plenty of ice now, and in the Fall freighted them to Atkinson, and while such birds would not now bring full prices on account of the trouble the dealers had had with my former birds I got through fairly well without loss. The Fall I left the freezer in charge of Bailey there were a great many chickens offered me in Atkinson after I returned and I packed them there; finer birds you could seldom see and full grown, and it was with much difficulty that I could get purchasers to take hold of them, from the belief that they were not equally good with unfrozen stock, which opinion in future years I had the satisfaction of seeing so thoroughly disproved that I was able to sell any quantity of frozen birds at the highest figures and the dealers waiting, ready for the goods whenever I had them packed.

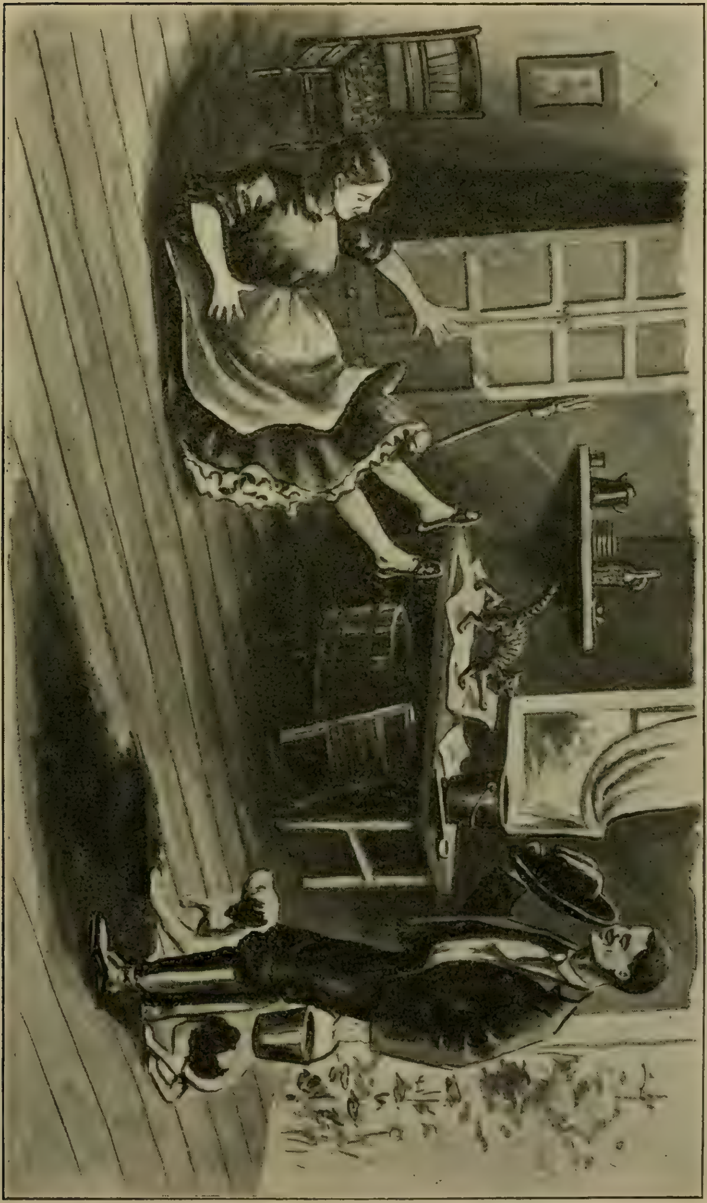
I will now record the last trip I had with the Firefly in 1873, which also was the last year I carried the gun there or elsewhere. This was the same year we went to Cresco as already narrated. Something of the novelty of such expeditions had already worn off, and most all of the main hunters had had their turn at it and retired. There still remained one man, E. Gladhill of Erie who was a noted shot and wanted to run the boat this year. Some were booked to come on later, but on the first of July I boarded the boat with him at Lansing, Iowa, and we started up the River, for two men could now handle the boat alone. We took a different route from what we had taken before. We followed up on the West side where there was no channel for big boats but the heavy rains had raised the water nearly all over the islands north of us, and there was a little secondary channel where a large body of water flowed close to the shore, partly obstructed by bending willows which we had to throw open as we passed them; in time reaching smoother waters and a stream that seemed to flow both ways, up which we followed in the direction we thought we ought to go. Sometimes we were rushed up hill apparently, and sometimes downhill, passing open farm land on our right and at last reaching a point where the water seemed to come all from the hills on the West and in the direction of the Little Iowa River which we thought till now we had got into. In the course of a mile or so we came out into the open again, finding a big flat of meadow land to our left, and still further the railroad track in sight above the lowland which was entirely covered by water. It was deep enough now so we ran over the bank of the channel and floated in the open field without touching bottom. I had never been here before and I remarked to Gladhill that the country which we were approaching was the finest sight I ever beheld, prospectively at least, for woodcock. We moved on up towards the railroad track and when we had gotten with twenty or twenty-five rods of the shore we struck bottom and there being a cottonwood there which stood up out of the water we tied up to it. We were then thirty or forty rods from the river up which we came and which passed under the railroad track ahead of us a little to the Northwest. The water was knee deep and we waded ashore.

We took no guns with us as we intended not to hunt till next day. However, we went up and examined the ground along the river bed, pulled away the bushes and were delighted to find every evidence of a large amount of birds there. The soil was honeycombed with the fair dwellers and we saw increased evidence of their immediate presence. Next morning we started in, after running our boat back into the channel and bringing it up near the railroad bridge, and first we ran over the small island immediately under the bridge, to the right as you go upstream, not over three or four

Railroad Bridge Over Little Iowa and Bogotts Bluff.

rods long or broad, and on this we raised fourteen brids, thirteen of which we took in, one escaping across the stream. Then we followed up above the bridge on a low wet muddy bottom with very little cover except large maple trees, and here shooting a few birds Gladhill said that as it was now near noon he would go back to the boat and get some ammunition as he was likely to run out. I waited for him to do so and he was gone over an hour. I waited so long that he might have equal chance with myself. I was fortunate in the morning in taking a supply of over one hundred shells, more than double what I usually take, which we put in the skiff and took up the stream with us. I had my breech loader, Gladhill had a muzzle loader. He remained away so long I was getting quite uneasy when at last he came and explained that he had stopped in the boat to cook his dinner. We started in again. It must have been nearly noon. The next island, which was a long one with high, dry land in the center, by going around the shore of it, the entire distance we secured forty birds. Then we followed up the shores on each side of the stream, finding and killing a great many until finally we struck a moderate sized island which seemed to have birds all over it. By this time my cartridges were running low and my companion said the same. The sun was then at least one hour and a half high. We fired our last shots, gathered up our birds all around where we had left them, and then jumping in our skiff returned to the boat. We had a large basket measuring over a bushel which we filled heaping full. After counting the birds, which numbered 171, 79 were for Gladhill and 92 for myself. Next morning we returned where we had left off the previous day and shot forty birds more. We stayed on this river about six or seven days, in which time we killed eight hundred birds, and we decided when we left that there were about a hundred birds remaining. We ran our game down to Lansing and shipped it all to Kewanee, where they were frozen and sold later for $1.25 per pair for the best looking. The rough birds sold as low as seventy-five. All of them would have brought the top figure if we had known how to renovate them as we did learn afterwards. This is, I believe, the largest number of woodcocks ever killed by two men in one day. If we had had a little more ammunition it would have been easy to have killed two hundred birds before sundown. Frank Forrester says in 1850 or thereabouts himself and another man killed over one hundred birds in Orange County, New York, on the Drowned Lands in one day, which is far less than the number we took in. I left the Firefly at this time, but the boys run it about two years more.

Before going I had quite a catastrophe near where the boat was tied up. In the picture you will see a house and some outbuildings on the right under the trees. Most of the trees between the house and our boat are now cut off and you could not then see that house. I went over there every day or two to get some milk and I felt quite at home. They were pleasant people and they showed me every courtesy. The night following our last hunt I went over there as usual. Ponto followed me along entirely of his own free will, and as I reached the house there was a cat sitting in the doorway, which however I did not notice. The dog was coming up, and the cat seeing him as I opened the door, slipped in the door beside me. I closed the door, the woman halloed out, "Scat there," and



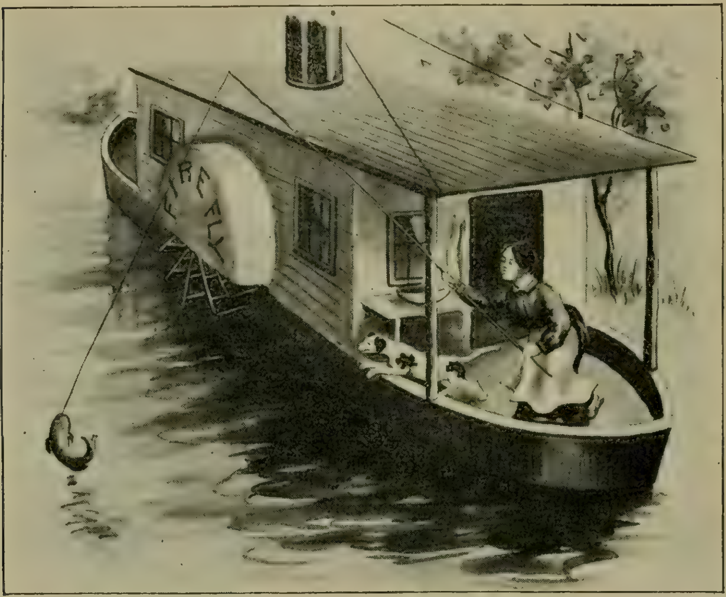
The Cat-astrophe.

started to drive her out. The floor was nicely polished and a little declining and as she made a spring toward me and the door her feet slipped and she came down square on her "spankers." There was a flutter of skirts and white robes only for an instant, when she was on her feet again and the wrath of Pelee shot out from her countenance. Purple lines stole down the roadway of the eyes and lodged in the corners of her mouth. The melodrama commenced. Just a little to the right as I entered there was a wooden bench used to hold the water pail and sometimes do the family washing, and above it the window. The cat, frightened at the confusion, started for the window and the woman a close second, and in its haste the cat landed first on the bench, on which was spread three or four sheets of fly paper. It stopped there and the consternation that cat expressed was beyond all computation. At first she swung her tail in whip fashion, like the drivers play their horses on our beer wagons, only there was no perceptible snap. Then she looked to her feet and tried to raise one after the other, and the whole sheet of sticky substance came up with it and the hind foot trod on this filmy, viscous blanket and she fell back again, the picture of unutterable despair, when she was ready now to capitulate. The woman seized the unoffending cat with all the additions her feet had clinging to her, took her to the wash tub, wrought over her until she could walk alone, threw her down outside and told her, "Now stay there!" I was too full of laugh to entirely keep quiet, but had to check myself for fear I should be treated the same way as the cat. I shall never forget what a "great matter a little fire kindleth."

Since the railroads came in on both sides of the river it gave distant hunters a chance to come in and hunt the best ground and compete with us. We sold the boat to a man in New Albin, a mile or two from where we killed our birds, and this boat was used one or two seasons as a ferry between that place and Bad Axe, now Genoa, just across the river. Taking the boat from first to last there was not very much profit in it, but the family with some reservations enjoyed it very much and their two seasons outing in this manner will not soon be forgotten. There was much to see along the shore, many curiosities to pick up, the finest springs everywhere, and the fishing was always good. We observed, as we came down, one sign at Lansing fastened to the railroad bridge, which read, "Fresh fish hear." We were always solicitous to know whether the fish heard or not, for there was a market here and fish were in great demand, and I imagined some time large schools would be heading that way and the net would break, as it did in Galilee. There was one point below Dubuque at which we caught more black bass than we could use. More than a dozen would rush for the bait as soon as it reached the water, and hundreds of them could be seen lying near the bottom and preying on the small minnows that swam around the point.

Catfish were caught at any time, and sometimes pickerel in the back waters. One of the sights was when Mrs. M. attempted to pull in a large catfish and it was doubtful awhile whether the fish would not pull her in. However, she landed a whopper.

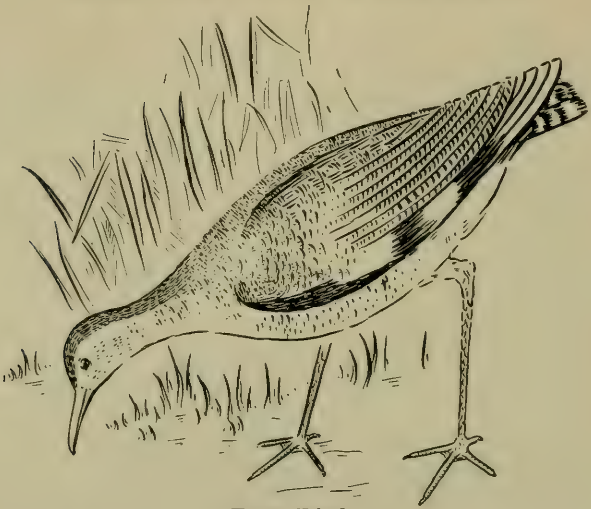
In 1873 our actual labors in the field, by wood and stream, ended. We had carried a gun for fifteen years and we now laid it down, never desir-



Mrs. M. Pulls in a Whopper Catfish.

ing to take it up again. We had in that time seen the finest flocks that ever inspired a hunter, pass out of existence. Henry County was practically denuded of game. The States west of the Mississippi River were no better off, but beyond the Missouri lay a great country full of every description of birds we had here except woodcocks and partridges, and these were found only in the lands further north, beginning in Wisconsin and running through Minnesota and Montana and the Dakotas, and here we turned our attention for twenty years more until 1893.

In 1880 my son C. M. Merritt went westward to Nebraska and other states to supply what we lacked in our own state. Chicken and quail were the principal game there, except in the Spring when dow birds and grass plover and some jack snipe were to be had, and a few golden plover. Some of our County hunters had already gone there, among them the Ogdens, and we opened trade about Hastings. In August the grass plover were fat and large and in great demand. A good hunter could kill from fifty to a hundred birds a day in the corn field. In a short time we gathered up there some four or five thousand birds at a uniform cost of ten cents each on the ground. The first birds were rather light, but the demand was so urgent they easily brought three fifty per dozen in New York. The latter part of August they became very fat, and finally sold for $4.50 per dozen for the best birds. A good many of the same kind came in here and were equally fat and salable. What we did not immediately sell we froze up, and although our house did not do its work as well as it should at that time we sold none of them below four dollars. In the winter we bought large quantities of grouse and quail, and from one town there was shipped over ten thousand chickens in the first fall and winter we were there. In the Spring we went back as we heard there was a species of game called dow birds, and these with grass plover, which at that time sold well, made us a good business. Up to this time dow birds had never been very much seen in the New York market. They had been killed in Boston Bay and old dealers remembered the time when they were there plenty. In this state we had frequently killed them in the spring and packed them separate on account of their large size and fatness, but they never brought more than golden plover, so we put them all together afterwards. The first birds we received from Nebraska we marketed at $2.25 per dozen. As their values became known and buyers found that they were to be had they advanced in a year to $3.50 and



Dow Bird

$4.00 and a few years later to $5.00 and even $6.00, at which price we sold a good many barrels. We bought grass plover at nearly the same price, but receipts began to increase so fast in a short time beyond the demands of the market that they declined to about seventy-five cents per dozen, and even sixty cents. Thousands of them were to be had at any price a buyer might give. The most we could ever get for these spring birds was two dollars and this occurred only once in two or three years.

As there were few golden plover in Nebraska and the flocks had mostly removed from Henry County by the drainage and plowing of the bottom lands where they fed, by 1875, we learned from some hunters that had moved to Minnesota that they were there quite plenty the first week in May. We went there, and in the neighborhood of Luverne and Southward to West Bend, Iowa, and there found them as we were told. They were now in very active demand and sold from two to three dollars per dozen. One year they were so plenty that they filled all the markets east and west at the low price of $1.25 to $1.50 per dozen. This was about 1880 and large quantities were frozen. By the latter part of the summer they were sold out and the quantity was never so great again. We held ours till the following spring when they sold for three dollars. These birds have since largely left that country. They move toward the Northeast about the second week in May and whither they go it is not known, but Frank Forester says that they go to Cape Breton where they breed. It is probobly that they have done so, and may do so yet, but we have not heard of any receipts from that country. Some day some industrious sport will follow them up to their destination as they certainly have not been destroyed and always will be in demand.

SUMMER GRASS PLOVER NOT PLENTY IN NEBRASKA.

We were not able to get many summer grass plover in Nebraska after the first year, and not many afterwards in this county. We think the slaughter of these birds in April is largely responsible for their scarcity in summer. They all leave the West by the first of September. In November of that year when they were so plenty we followed them to Texas and had almost overtaken them, when a freeze coming on they passed into Mexico, where they winter. The spring birds were hunted with such severity and with the capture so easily of many thousand dozen in the course of thirty days, and with prices so ridicuously low, we gave up packing them in 1892. They ought to increase now when hunting them has ceased, if the laws of the State protect them, as we think they do. The same is true of dow birds, which have now become very scarce, covering as they do, only a small scope of country in Nebraska and Indian Territory; if they can be shipped they will soon be hunted to death. Golden plover were never plenty west of the Missouri, and almost always of a poor quality. But few snipe were in the State, and grouse and quail the only game of note. Nebraska has, I think, the finest quail of any state, even better than Kansas or Missouri, and the grouse are unexcelled. Iowa and Illinois have no better. Kansas has two kinds of grouse, one very small and not much in vogue. Besides they have the common grouse which are excellent. Quail are always plenty beyond the Missouri, in Kansas, Oklahoma and Indian Territory, and from the latter the largest supplies have come of late years. There is no reliable estimate of the numbers that have been there killed. Much of the time the laws in these Western States have been entirely ignored, but the pendulum has now swung backwards and it seems probable that the shipping of all kinds will be outlawed, and the result already has been that game has largely been withdrawn from the tables of the wealthy, and hotels and restaurants do not call for it in the cities where it was once so plenty. It is certain that with the population rapidly increasing it could not long remain a standard article of diet, somewhere it must give way, and it seems likely that this is a good occasion for looking around and noting where we stand. Snipe and woodcock are also rapidly decreasing and though the laws may check them for a while, their destruction is imminent in the near future. Ducks seem to follow the rest. Fifteen years ago the Mississippi was full of mallards in November and December about New Boston. We packed 150 barrels in thirty days from Keithsburg and New Boston alone, and after this flight we had lessening numbers very fast in the following years. Up to that time teal were abundant, blue wings in particular came in early, in October around Annawan, where there were shallow ponds and feed plenty. Wagon loads of them were taken out there in thirty days, of the very best quality. We distinctly remember getting in seven or eight barrels at a time within three or four days which sold in New York at seventy-five cents per pair, the highest price we ever were able to reach, and strange as it may seem, when they were most plenty. Such birds would not bring over fifty or possibly sixty cents in New York for the last few years.

DESTRUCTION OF PIGEONS.

Pigeons can hardly be called game, yet in our first few years in the West we bought large quantities, mostly from St. Louis. At that time W. W. Judy was the ruling game dealer in that city. We first became acquainted with him when we were returning the Firefly from the South in 1870. While stopping in the city we inquired for some particulars about the River, and were referred to him as an expert in all river matters. That was the only time I ever saw him, but he impressed me very much as a man to make a friend of. He was very courteous, genial and more than ready to assist me in every thing I asked for. Later my son made his acquaintance and we bought many thousand dollars worth of game of him. Pigeons were his specialty, and we commenced to take them at seventy-five cents per dozen. After taking a few hundred dozen he reduced his price to fifty cents on track, and we bought a good carload of him at that price. They came to us in sacks of fifty to seventy-five each and we froze them all up in about the year 1881. We marketed them in the spring following, and although they were not active, they sold for one dollar to one twenty-five per dozen, a few at $1.50, and we cleared fifteen hundred dollars on the lot. Later Mr. Judy died, and we bought of his successor stall fed birds which were trapped and fed and fattened and then killed for market, when they easily command $2.50 to $3.00 per dozen. Some of these birds we kept two or three years. The last barrel we marketed in Boston at full price. These birds were marketed so closely and destroyed so ruthlessly, that we believe that these were the last stall fed birds that were ever marketed, and pigeons themselves are now only a remembrance. In 1860 to 1865 they were plenty in Illinois, vast droves of them appearing in the woods in fall and spring and often taking to the wheat fields in September, where they were easily captured. Their meat in its wild state was dark colored, of coarse texture and not urgently wanted, but when well fattened they were very much like tame squabs which now take their place. At the time we commenced hunting woodcocks on the Mississippi, the pigeons flew so thick and fast in June, that you could shoot them by the hundreds without moving a step, but to market them required they should be packed in ice and expressed, and when this was done, there was very little left out of one dollar per dozen, at which price they could be sold. On one occasion while shooting along near the mouth of the Maquoketa, I carried my dinner with me in my game sack, and about noon was getting hungry, and sat on a log to eat, when I found my meat had all spoiled. It was a terrible hot day and I could not work much longer, when on looking up on a tree over my head, I discovered a lone cock pigeon sitting on a dry limb. I soon brought him down, and kindling a fire made a very comfortable dinner and was able to go on with my hunt till nightfall.

About 1880, after we had opened up in the West we abandoned the Joles country and took the Annawan trade, which was large for many years, instead. With the exception of prairie chickens and woodcock all kinds of prairie birds there abounded and continued so until about 1890. Most of the trade was in the months beginning with and following September and continued till the January after. In September we had the first young prairie chicken and as the middle of October was reached the duck shooting was excellent. At this time we went regularly to the Caugheys four or five miles North of Annawan where the hunters worked regularly and brought in their game and exchanged it for cash and ammunition. Blue wing teal were quite plenty and mallards increased as the month of October waned and they began to put on their winter coat. At this time, besides Caughey and Hiserodt, Fronk, Jim Smith, the Mapes Brothers and as many straggling hunters that came along, with considerable receipts from Charlie Clemens, we gathered up a good load of valuable birds every trip till the ice drove the ducks out, when the trade and the season closed. Hiserodt kept record for that time and his accurate sales for his own shooting were over four hundred dollars.

At this time we frequently met our townsman Uncle Johnny Lyle either coming or going to Annawan or both. Manytimes he rode with us. On several occasions he had a farm wagon, loaded with barrels of flour. One day he told me that White, the Miller, owed him a good bit of money which he could get only partially by payment in flour, and that every load he took away cost him a hundred dollars a barrel. After awhile I saw him in town while I was looking over a load of birds and he said to me, "I think you have traded long enough and made enough to retire and take it easy." I retorted that when I got so I could sell my birds for a hundred dollars a barrel I was going to quit like White did. It was only a little while after that I sold very many barrels at over 3 hundred dollars, each, six of them going at one time for nineteen hundred net. Uncle John, as we called him, was always very free to loan you money if you needed it, but when you paid him he always exacted compound. He was a keen judge of character and seldom read unwisely.

Prairie chickens have not been plenty in this state since 1870. In Nebraska they were plenty till after 1880, when the rush of hunters from Illinois reduced their numbers. At that time we got most of our supplies from Nebraska. In ten years more the same fate befell the western birds as our own. If immigration had continued into the state as it did into the states adjoining, the end would have come sooner, but Nebraska has now a smaller population than it had ten years ago. As a consequence more prairies remain unbroken, and where prairie fires are kept out many flocks are raised yearly. When Nebraska and Minnesota and the Dakotas all come under the plow all the laws that can be made will be impossible to save them. In this state they are confined to low swampy lands lately redeemed from the water, where there is abundant cover for their nests, but when heavy rains fall the young are all lost. The oldest inhabitants will remember the time when the flocks in this state were numbered by the hundreds, and very many contained one hundred to a thousand birds. I have seen more birds fly up in one field at one time in October, than are now living within the limits of this state, and in one instance in Stark County on a cold day in early winter I have seen acres covered with the birds, as thickly as they could sit. Along low valleys like the Edwards River the birds would gather at the approach of snows in such quantities, that they covered ground for a distance of a mile in length, and in 1861, north of Mt. Pleasant, some fifteen or twenty miles, I have seen the fences at the first fall of snow covered with chickens for a whole mile in a straight line without a break. In this country when snow fell, after feeding on the fields in the morning, they took to the high wood covered hills by the thousand, where they remained till later in the day, when they flew into the corn fields again. In the day time in Iowa, before the fences were so plenty, they gathered in the grass in long ridges on the prairie, and from ten o'clock, when they began to set for the dog, in sunshiny days they remained till four o'clock, when the whole mass would raise and fly to the corn fields to feed. These ridges made excellent sport. I have killed as high as forty a day in the country Northwest of Ainsworth, in Iowa, the first of December. Before snows came grouse were in excellent demand at sixty-five cents per pair, but they had to be transported by express so that it is not probable they cleared us much over two dollars per dozen. Board was cheap, but ammunition was very dear. Lead rose rapidly in the markets when the Civil War came on. Shot was $5.50 per sack, and powder $8.00 and upward per keg. So long as the snows held off we did well enough. By earlier rising and watching the flocks as they came from their roost in the morning, we got a fairly good idea where they were in the day time. They would go back anywhere from half a mile to a mile and a half, where the prairie grass was the tallest and thickest, and in places where young shoots grow up and interlaced the stalks of grass the covering was very thick. The birds lay close, and you had a picnic. There was no use looking for them much before ten o'clock. If you did they would rise en masse and move away to some neighboring ridge. After the sun shone warm they would begin to scatter out, each bird by itself, when they would rise singly and give you a good shot. One day I marked the direction of the flock and I found them scattered out over the entire length of the ridge, and I followed it till feeding time. I lost a good many crippled birds, but the time for looking up was too valuable for that purpose, and where they fell among the corn stalks the hawks found them and ate them up before morning; but we bagged forty birds.

When the snow at last fell the sight of the moving flocks was like that of the mallards in the Fall, streaming along over the grain fields, not unusually half a mile in length, but they were very wary on the fence, or wherever they alighted. The young man with whose father I stopped had heard of a trap with double lids which fell in as the bird touched the trigger and jumped upon it, trying to reach an ear of corn overhead, and after finding that they worked well, he built a large number and put them out in his garden close by, and was able in one week to catch over five hundred, which we bought At that time trapped birds would outsell those that were shot, but this fancy did not last long because trapping birds destroyed them so rapidly, the laws were enforced and shooting became the only mode of capture. After this so many were marketed that the price went down to thirty cents per pair in New York in the early Spring.

In 1857 we killed our first chickens in Henry County. We returned from the East in September, bringing a man to hunt with us. We went four or five miles East of Kewanee, and we did not do well and the price was only seventy-five cents. By the time cold weather set in, my partner threw up the sponge and returned to his native land, and I immediately made the acquaintance of the Emerys in the Kemerling country, northwest from Kewanee a few miles. Hull, the young man of the family, was a good shot, and remained on the old place till his father died, and the son-in-law, John Davis, of Davis Bros., moved away. Part of the time I shot northeast of town, walking two or three miles each morning, and the snow was heavy and the air very cold. We had no rubber boots at that time, and I often had to pound my feet on the hard ground a half hour or more, before they became comfortable. I shipped occasionally a barrel and for a wonder, prices all through January were very good. Prairie chickens brought one dollar per pair readily, and quails three dollars. At that price I could make five dollars a day, for I could average two dozen quails beside a few chickens, most every day on my way home, which had plunged under the snow for the night, and rising up close by you could scarcely miss them. The Express office at that time was in the old Lyman building, corner of Second and Main St., and the Express agent was Charles Davenport. After awhile he wanted to buy my birds, and as he offered to give me as much as I could get for them in New York, I sold them. It was the time of wildcat money, which, however, he did not offer me, and I received my pay all in gold. It was a very profitable venture for him, so much so he took a number of hunters late in the winter to Iowa, and on his return he gave us such flattering reports that we went there the next year. Davenport remained in Kewanee only one year, when Jerry Hopkins started the store and H. C. Parker became Express Agent. Jerry himself sometimes bought a few birds, and as he kept ammunition his place became a rendezvous for all the hunters. At this time Hull Emery and his brother-in-law John Davis were there all together one forenoon, and it was very cold and the stove was red hot. John says to Jerry, "Put me up a pound of powder." Jerry did so and handing it to John he shoved it in the back pocket of his coat, and swung around like all men do with his back to the fire, never once thinking of his powder. His coat brushed against the stove and set it on fire, and the smoke rising, I saw that an explosion was imminent and I sung out a warning, which was very timely, as otherwise it would have destroyed his coat and given us a funeral.

While woodcock shooting was good, we did not kill many chickens in summer, but left them for Fall. But in 1865, as we have said, the shooting was so poor around Savannah and up the River, we persuaded the Mapes Brothers to come to Sabula opposite Savannah and hunt prairie chickens. They went out about ten or twelve miles in the country where they found them quite plenty, and in the course of ten days brought us in about five hundred of them. As I could not find enough boxes to pack them in, I went across the River to Savannah, and there at the saw mill had a supply of thin boards sawed out to line boxes with, put them in the River and towed them down to Sabula, going along with a skiff to guide them. There I put up the boxes double, filled them in between with sawdust, and shipped them next day. They arrived in fair order and sold to A. & E. Robbins for seventy cents per pair and no commission. Afterwards I went out on the same ground and hunted a week and came in with my load late in the afternoon, tired and hungry. I ran into a baker shop at Sabula to get a lunch. I noticed the flies were very thick there and one or two opened up in the piece of pie I ate. However, I swallowed it and went on to Savannah. After dark I was seized with terrible cramps and pains and I thought it was over with me, as it would have been, if I had not got relief soon. Christian Science had not then been known or I should have been inclined to call it an illusion. I bore it as patiently as I could and in the course of two hours I got better, and resumed my usual work next day. I found the baker was using cobalt to kill the flies, not expecting to kill me or his patrons.

It is interesting here to note the prices which game brought from 1856 till 1895, a period of thirty-nine years. The first year prairie chickens sold for one dollar per pair throughout the season, but trade did not commence till late and did not last long. Next year they sold from seventy-five to a dollar. IN 1859-1860 seventy-five to eighty-five cents. In the first years of the war they sold down to twenty-five and thirty cents, with an occasional raise to sixty or sixty-five cents, when stocks ran low. After 1864 they held to a more steady price, generally from eighty-eight to $1.25, but in 1865 they reached $1.50 and after that for many seasons they ran from $1.12 1-2 to $1.25, from October till the last of December. After the general rise of prices and the depreciation of government money was over, and during the 70's, the lowest prices would be in December, when supplies were the largest, but seldom went down to sixty cents again. In these early days sales were legal till March 1st, and dealers began to put away birds whenever the prices declined in December. Somewhere about 1880 or probably a little earlier the season was shortened to February 1st, but the growing scarcity held them during the holidays at about one dollar, and then till February about $1.25, but the law was not observed with any nicety and the birds sold any time till warm weather, but were not exposed publicly on the market. In Boston it was legal to sell birds till May 1st. Probably more birds were sold in this time at one dollar than at any higher price. After the early 80's and freezing began, dealers laid away their birds in December and January and brought them out in the month following. With exceptions of one or two years grouse hardened in price till 1895, when they reached the highest point ever before known. Summer birds brought extreme prices. Birds did not have to wait for a market and so were not laid away. There were as many buyers as there were sellers. Our receipts were fairly good and we sold all on orders as they arrived. When we got an accumulation of three or four barrels we were anxious to dispose of them. I would get an inquiry from New York and also from Boston every two or three days and sometimes daily. In that case I had to express, which would cost me double the price of freight. I had three or four barrels on hand and I concluded I would ship them to Lawrence and take my chances of getting an order before they arrived. I thought if I did not I would telegraph at the end of the line to hold them for me and not deliver them. I shipped them and when they were two days on the road Lawrence wanted that number of barrels. I sold them with no specifications how they should arrive, or the exact time, but they were supposed to arrive prompt. Two days after they were delivered to him on the same time they would have arrived, if I had sent them by express. He kicked pretty hard, because he saw the ruse of shipping them to him and selling them to him before he got them, but there was no recourse. I often did this with commission men, who were not my regular consignees. They would invariably quote me prices which were higher than the market, when they had none of mine to sell and wanted to get some.

THE PHILADELPHIA MAN WANTS EGGS, BUT NOT THAT WAY. KNAPP & VAN NOSTRAND OF NEW YORK MAKE A BAD GUESS.

I waylaid a man that way in Philadelphia on eggs. Before he wrote me the price of eggs and about the time that I thought a letter was due, I shipped him several barrels of eggs by freight, without giving him any notice. Then his letter of advice reached us in a day or two, that prices had advanced several cents per dozen, and by the time his letter reached me the goods came to his hand, and he promptly returned me twenty-five cents per dozen for the whole lot without discount of any kind, and evidently much more than they were worth. I sent a barrel of dow birds to Knapp & Van Nostrand and they claimed they were too long kept for the price (merely a smart guess) and asked what disposition they should make of them. I ordered them turned over to another dealer, who was well pleased with them who gave me fifty cents a dozen more than I had billed them to the first parties.

I will at this time relate a deal I had with H. A. Sumner, who was really Edward Sumner, but through some misfortune was compelled to operate through his wife's name. He ordered a barrel of snipe in the spring. I shipped them to him at a set price and at the same time a barrel to John A. Lyon, commission man. On receipt of them Sumner reported that the barrel was spoilt. In a day or two I got sale from the commission man which was at full values and no complaint. I reported the fact to Sumner. A few days later he reported that he might be mistaken and he would let me know when he saw what he could do. Thirty days later he returned me the full price as they were billed.

A BAD DEAL WITH N. DURHAM. A WORSE ONE WITH EDSON BROS., N. Y. MISTAKEN IDENTITY OF A. & M. ROBBINS.

I had two instances of similar character, one with N. Durham and one with Edson Brothers, the details of which in the latter case were too offensive to publish. In either case I regarded it as a steal downright and simple, the facts of which I do not state expecting them to repay me. I have but one more complaint and this is not with A. & E. Robbins, but with A. M. Robbins, their successors. These gentlemen were heavy dealers, like all their fathers were. They always insist upon the choicest stock and I always gave them the best in the market. They asked it as a special favor that when I had something fine I should let them know, and when I sent them they received them acceptably. After the death of the old firm they in repeated instances ordered snipe and plover and teal duck, and when they were delivered to them, all of them being select birds or intended to be so, they would report they were not satisfactory, and asking for the manner of disposal. One day they ordered a barrel of teal duck. They were refused and returned. It was a very cold time in winter and came back by freight. I immediately unpacked them from the barrel, repacked them in a box, and taking out a few birds that were not hardly up to the mark, I got another order from the same party and returned the birds almost as soon as they had landed. This time when they received them, they were all right. If I do not know what good birds are, I must be very dull of understanding, after passing a whole life in the business, and probably am incapable of knowing right from wrong. One thing I would warn all shippers against. If you send a stock of goods of any kind and trust them to commission men, learn the character of the persons to whom you ship beforehand, and do not be deceived by flowery words by which they may attempt to gain shipments. By doing this you will save a great deal of worry and often of loss. No commission man, when once he has got your goods in his possession, likes to have them taken away and given to another. He has figured out for himself a profit in the sale and when he has a suspicion that you are dissatisfied, and you order him to do this, you will very likely find that all such goods have been sold at a ruinous price, or perhaps he has absorbed them altogether without any price, and there will be no chance for recovery for you. We were speaking of the prices of birds about the time that freezing began to be in common use. At such times any reduction in the price of game birds on account of a large supply would send them immediately to the freezers, but in 1870 and '71 there were no freezers to be had; at least there was no public freezer in Chicago. We bought very many of our birds, especially snipe and teal and redheads and some canvas in Chicago, and some large lots of canvas and red heads in St. Paul, and almost universally they paid us well. T. D. Randall was then in Chicago, a commission man, and he received a great many snipe in the spring. He said to us that if we would give him one dollar per dozen, I might look his birds all over, select what I liked and refuse what I liked. At this price I could not buy them in the country, and therefore for that year we let them go by and bought of him, and at the time of the fire in Chicago in 1871 prairie chickens and quails were offered in any quantity on the Chicago market. Shortly after we had got them packed, prairie chickens advanced in Boston the first of April to $1.10 per pair. Then as we started to unload the market broke down to sixty cents, and we put them in the freezer and carried them over till fall. When fall came they were not in first class order, neither were they very bad. They were slightly mouldy around the head, and I suspicion they had thawed a little at some time in the course of the summer, but they held their shape, and we had considerable difficulty in disposing of them because our room was not quite cold enough. At the same time the stock from Cresco came on the market and this being so very undesirable that it threw a cloud on all frozen stock, so that for a year or more such goods could not be disposed of for any reasonable price. Still we were not so much disappointed as this was our first trial and they sold from seventy-five cents down. In 1880 chickens brought $2.50 in the early fall in Nebraska, and $4.00 or more through the winter, while towards the nineties they advanced to $5.00 and $6.00 delivered here. Most of the time from 1871 to 1881, a period of ten years, prices would run down about Christmas in New York to seventy-five cents for chickens, and later would run up in

February to a dollar or more, when birds were scarce, and quail in the same way. When freezing began to be general in the early eighties, changes were less violent, for all superabundant stocks were put away and left to be absorbed when prices had advanced. I should think in those ten years $1.00 would cover the average prices in January and February. From 1881 to 1895, there were many months when prices reached $1.25 for chickens, and three dollars for quails, but $2.00 to $2.25 was the more usual price for the latter and when there was an over supply a year or twoquails ran down to from a dollar to a dollar and a quarter in the winter and spring. From 1885 to 1895 heavy receipts of quail came in from St. Louis, and for some years later, and by November the market would break from $1.50 to $2.00 and advance to $2.25 and $2.50 later, and sometimes to $2.75. In 1895 occurred the highest price ever recorded till then for chickens or grouse as we call them, till 1900, when the Game Laws coming to be enforced produced a great scarcity. There was a very small crop raised on account of the extreme heat that season and birds brought early in September $1.00 to $1.12 and $1.25, continuing high all the fall and winter, and in February reached $1.75 per pair, at which price we sold a great many barrels. There had been no complaint or obstruction to shipping at that day up to February and the market seemed constantly to gain strength. The Boston market was very active and birds sold there all the spring and quail to May 1st. In February, 1875, Messrs. Putnam, Wiggin and Upton sold for us a box of quail of about two hundred birds at five dollars per dozen, the highest price I ever was able to reach. I may say that the birds that I sold to Davenport in 1867, he reported to me were sold, the quail for six dollars and the chickens for nine dollars, which I have no reason to doubt was true. Since the troubles began in 1896 and the seizures of birds for illegal holding or shipping the receipts of game of all kinds on the market have rapidly decreased, and the demand has been correspondingly light. Some birds for a short time have brought improved prices, prairie chickens selling up to $2.00 per pair and partridges in October and November to $2.50 and $3.00 per pair. Quail have been so easy to get from so many distant points and being of small bulk have met the demand more promptly, and have not sold much higher than before. In 1880 our first frozen partridges sold for $1.00 per pair in September. In the next five years fresh young birds brought from $1.50 to $2.00 and frozen from $1.25 to $1.50, held birds of prime quality reaching the latter price, at which price we sold thousands of pairs. With these high prices traffic was awakened in the Northwest and as the tide of birds began to flow in prices declined for fresh drawn birds from seventy-five to ninety in October and November, and September $1.00 to $1.25. After a continued decline of several months prices would revive again in February and later, so that we had two good seasons to sell in, September and February. Then the new laws forbid their transportation out of Dakota and Minnesota, so that it became impossible to get them through to market in any number, from which cause prices have reached the high point noted. If this had not been done the ruin of the partridges was absolute. They were never plenty in Illinois. I never saw but one or two birds in the sixties. In the seventies and eighties quite a good many were reported in different parts of the county, but the destruction of the woods and underbrush has gone on so rapidly it is doubtful if there are a dozen birds in Henry County. The swamp lands in the north part of the County have dried up so fast, all kinds of ducks make short visits in the Fall and the teal of both kinds find no place to light or feed. Mallards, which used to stay all the Fall until the ponds froze up, often thousands of them in the marshes until December, when the shooting was best, come but seldom and in small numbers, and do not remain but a few days. Red heads and canvas back were always scarce here, are never seen in the Fall, and few in the spring, when they are uniformly poor. For many years we had large receipts from the Illinois River in the Spring, from Havana, Beardstown and Maquoketa, and buyers took them readily in the Fall at $2.50 to $3.00 per pair, for which they would not now pay over one dollar, and the trade was of such small proportions it was finally neglected or abandoned. What shooting there is in the Fall is in Wisconsin, Minnesota and Dakota, and there are the only commercial birds obtainable, and the restrictions placed upon getting them make their capture difficult. It seems that only in a very restricted sense the commerce in birds is likely to be kept up, and if the demand does not increase it is not needed. The trade will be confined to Fall and early Winter months, if any continues, as it was forty years ago. The shooting of prairie chickens in Henry County has been very light since 1870. The larger part has been killed in the summer months, and only till the new law went into effect did the hunters confine their hunt to the month of September, and now killing is entirely forbidden for several years. This could have been improved by making the open season in October instead. Then the birds would have been able to take care of themselves. The nicest weather we have is in October, when the killing frosts have cut off the top of the corn stalks, where the birds stay during the day time, and are easily captured. There is much science in getting a good bag, even then, for the time they will allow your approach is limited between nine o'clock in the morning and four or five o'clock in the afternoon. It is useless to go into the corn field before or after that time. Only the brightness of the sun holds them in cover, and they are scratching and dusting themselves in the hot hours of the day, and wandering listlessly about, not going very far from where they first alighted. The better way is if you are up early in the morning in the neighborhood of fields they are known to visit, to quietly watch their movements as they leave the long grass in their roosting places, when you can mark them carefully as they light down in the field. Moreover, if you go to hunt them do not waste your time on weedy or uncultivated fields. They will not go there unless frightened, and it would be almost impossible to find them if they were there. Therefore pick out the clean fields and those that have signs of being used and do not disturb them on cloudy or rainy days, when they come out into the grass and stubble and will not allow you to approach them. We hunted after this fashion for many Falls until snow flew, first Northwest of Cambridge a few miles, and later on the Edwards bottom South of the city, and always with good results. South of Atkinson in 1866, in November, about five miles out, we hitched our horse for three successive weeks at the same tree top, omitting Sundays and Mondays, and we took in that time three hundred and forty chickens. The lowest number we killed in any one day was twenty, and the largest was thirty-six, which netted one dollar per pair, very closely, on the ground. On cloudy days we looked after quail and snipe, and let the chickens rest. In the corn fields the dog was trained to beat the ground very closely, not over a rod wide in any direction, while in grass cover he would beat out many rods and seldom flush any. The moment he struck a chicken's track or got the wind of one he was as immovable as a rock till you came up. Further than that we found the great necessity of getting the best gun obtainable, and not carry it too long. whenever anyone wanted it more than we did. We usually bought a new one every Fall, so they did not lead, and sometimes late when the birds grew wilder, we used wire cartridges, which, when properly fitted to the gun, did wonders. I know I have killed single birds over twenty rods, and I believe in firing at a flock I have killed them nearly double that distance. After January we hunted quails in Knox County and they sold readily after 1862 at $2 to $2.25 per dozen. For two or three Winters the shooting was excellent. The corn fields were very small, only a few acres at most, in among timbered settlements, and in all that time I never heard the report of a gun unless it was my own or some of my companions. You would not get very far away in a day. If the birds were in the corn field and you did not get them there you followed them out on the hillside and picked them up one by one, sometimes in little brush patches, sometimes where a clearing had been made, and the little oak shoots had sprung up a foot or more and left a cover of brown leaves where the birds gathered as night approached. Sometimes a plaintive note was heard from lost and scattered flocks, which brought us up to them again. The hillsides were often very steep, and it was quite a task in ferreting out the birds here after they were once scattered. We kept them in limits as much as possible, killing the outside birds first, and in this way many flocks slept their last sleep. Many times a day we would secure a whole flock, or nearly a whole one, at one firing, and fifty to seventy birds was a usual day's hunt. One large flock of twenty birds used a corn field adjoining a small timber patch. The stalks were so broken they would not stay but a short time, and I missed them a long while. One morning a light snow had fallen. As I struck the field, which was open so I could see far down the rows, I discovered the flock piled up and lying very flat on the ground. I walked along as if to pass them by in a quartering direction. As I got a step or two past I turned suddenly and faced them and fired one barrel. Only one bird raised, which stopped with the remaining barrel. All the birds that fed in the fields were fat and heavy, but there were some flocks which never left the timber, and they were so poor they could hardly fly. These we did not molest. One of those years we hunted on the hills above Gladstone, along the river bottom below Burlington, where we found many of these starved birds trailing around in the snow among the bushes near the river with apparently nothing to eat, and their cry was pitiful. It was a very cold Winter, and in many places you could walk over the snow banks. Many flocks perished, and they had to be recruited the following year from places where food abounded. I have never seen quails more plenty in Henry county than in 1859 and 1860. At that time we were hunting in the fields bordering on the Big Slough and many corn fields were as small as in Knox County. Prices in the Fall were 18 to 20 cents each. In November they fell down to $1.50 per dozen. We were shipping to A. & E. Robbins, and every week our shipments piled up more and more. The first of December we shipped over a thousand birds in one day and the price fell to eight cents each. We were buying very many of them at one dollar per dozen or over, and we had to abandon the business for some months. Those hard years followed which we have already described, and afterwards we did most of our hunting in Knox County. At that time the bluffs along Rock River and Green River were full of birds, but they were so low we did not seek after them very much. When the revival of prices came towards the end of the civil war, the reserves were drawn down quickly, and since then all efforts in that direction have been scattering and infrequent. Bushes have been cleaned up, vines torn down and the grass has gone under the plow, and what flocks there are have fled back into the great corn fields, where it is difficult to gather very many of them. We skipped one winter in Knox Sounty to give them a chance to recover if they would, but after our return there we found them no plentier than when we hunted them every year. The great desideratum with quails as with all other birds is that they should have grass or bushes, or some kind of cover, and that is now seldom seen. The most plentiful supplies in this country have come from along the Mississippi, where the country is rough and fitted to be their home. A dozen years ago nearly all the quail were killed in this neighborhood, but a remnant was left around New Boston, Keithsburg and further South, which recruited the fields wherever the birds were frozen out, so that they are moderately plenty now all over the county. We do not look to see them any more plenty as corn fields are not suitable for nesting places. Since 1880 buyers have had recourse largely to Kansas and Nebraska, and Oklahoma, and the supply there has seemed to be limitless, till now the laws have become enforced, and the cities will have to do without.

We have not said very much about frozen game since freezers came into fashion soon after 1880. I imagine there will be no dissenting voice to the statement that from that period until 1892, and in some cases until 1896, that where the freezing was properly done and the temperature steadily maintained, the business was very profitable. The main support was the active demand for game birds of every description, except between '93 and '96, during the commercial disasters. In many places game gave out, and this threw increased demand on the remaining fields of supply. No first class hotel or restaurant was considered worthy the name that did not regularly furnish game dinners. Game was a cash article, and it could be sold for cash as readily as government bonds. One successful packing made the way for another, and one packer's success was the prelude for another's success. In Iowa and nearly all the States West of the Mississippi the industry flourished, some places packing only snipe and plover, others packing chickens and quails, and still others dow birds for the short season they tarried, and some packed only ducks. All these varieties were laid away in abundance. What were not native and of sufficient quantity we shipped in from the several States, and tested the keeping qualities of the different kinds thoroughly. After the experience had in packing quails in air tight packages, we put up all our birds in the same manner. It was some expense, but in the end it was economical, as well as successful. This prevented prices from going so high as well as it saved the market from going too low. Hunters made good profits, as well as the packers. In some cases we carried the goods to the second or third year, but few people took the chances of carrying them so long, and unless the temperature was suitably low or some kind of air tight packages were used, very few took the chances for over six months. When we did carry longer we did it with much hesitation, and generally from compulsion, where some kinds of birds did not find a ready market. The only kind that gave me much trouble was mallards. They occupied a large space, were constantly accumulating on your hands and, of course, went into the freezer with the result that there was always some complaint that they were soft when they came out. With this exception, the useful sorts opened up fine, grass plover exceptionally so, and snipe and teal always made money.

In this connection past experience may be of some benefit to those who anticipate embarking in cold storage. The kinds of goods to be stored and the temperature required for each are the important factors to consider. Until 1876 refrigeration in the United States had made no progress. At that time and during the World's Fair at Philadelphia, the Pictet machine of Geneva, Switzerland, was exhibited, and the interest in it became very great. The principle of the machine was the reduction of sulphurous acid under pressure, when it becomes a liquid, and is then allowed to vaporize and cool a current of brine which flows around the water tanks to be frozen. Either this or the expansion of some compressed gas is the basis of all refrigerators, and Pictet's plan is by many considered the best. The main difficulty with all these machines is their expense, both in the first cost and later in the running of the machine, and unless the business is very large and can be successfully applied to the preservation of many different articles, it will not be found profitable. If I were to engage again in cold storage I should most certainly go back to the old method, where the expense is trifling, no possibility of your freezing rooms getting out of order, and one man can direct and almost maintain the efficiency of a large plant. Our old style was so simple and cheap that its total cost did not exceed three dollars per barrel to carry frozen goods for one year, or three hundred dollars for a room holding one hundred barrels. There is nothing to be gained by holding a room below 18 or 20 F., for any frozen goods you may want to carry, and the cost of ice in most places is quite inconsiderable. For eggs, where temperature to be maintained is 30 or 31, I should use a fan to expel the foul air, which can easily be run in connection with a dynamo now to be found in all important places.

Up to 1880 I had not handled any frozen partridges, and although Bond in Chicago offered them at fifty cents per pair, I did not buy, as they were not reputed to keep well when drawn. At this time I put up a few whole birds frozen, to see how they would keep through the Summer. In the Fall they sold promptly at $1.00 per pair. Then I put up more partridges, five barrels, placing them alongside of frozen turkeys. When the turkeys were sold I did not realize on two cars as much profit as I did on the five barrels of birds, when I discontinued packing poultry entirely. Along after the early

80's Col. Bond was buying large quantities of frozen partridges from Minnesota, and they were whole birds, but the market was full of them. I commenced buying of him and packed away several thousand pair at about 16 to 20 cents each. They sold well in the Fall following at $1.25 per pair, and later at $1.50, before the Fall price dropped again. Markets had now improved so much, trade was stimulated and a new dealer appeared in St. Paul with whom I connected later, and who, in a few years, monopolized the Northwestern trade. I took several thousand pairs of him at $4.25 per dozen. This relieved the market from going down so low as usual, and the St. Paul dealer replaced his sales in still larger lots, till all that kind of game seemed in a fair way of extinction. The state then took a hand and forbid shipments out of it. In the meantime we took in fifteen hundred pairs in Wisconsin in the distance of not over one hundred miles, and with this stock on hand we had enough to last two or three years. We carried them through that length of time, and the last birds were as good as the first, and brought as much money, for all that we kept in good order. Soon after this Col. Bond left the trade, the Robbins' died in New York, and the life of the trade died out with them.

No history at this time of game and game killing in Henry County would be complete unless it embraced the doings of the Mapes Brothers, and especially John Mapes, who has been here since the first hunting began. His father was an old resident when I first knew him, and I heard it said at that time his word was as good as his bond. John was of heavy, Herculean frame like a gladiator, with a constitution exceptionally hardy, and now at seventy years of age seems likely to remain here some time. Their farm was located on the head waters of Mud Creek, an inconsiderable stream which finds its way into Green River, and these Nimrods traversed its banks with such frequency the paths were worn as deep as that of the Indians' along the affluents of the Missouri or Mississippi. They had a trace of Indian blood in their veins. They were of the nature of Gypsies. Hunting, fishing and trapping was their pastime, and they descended the valley through which the Creek flowed much as the Northern

The Nestor of Hunters.

tribes which overran Rome, not so much for conquest as to enjoy the fertile fields of Lombardy and Piedmont. When the family grew up the major part went westward to the Republican river in Kansas. John always bore up the family name for his exploits with the gun and rod. I have known him to hunt snipe all day from five to ten miles away, in the Fall, and bring his birds to town and sell them every day when there was very little market at five cents a piece. One Fall he lugged his chickens from the bottom to town the whole summer through till he was nigh broken down. Sometimes he was down the Mississippi in the Fall, sometimes up that stream in the summer. Then he would be hunting quail in Kansas and Nebraska through the winter. Later he moved down on the Green River, and got him a farm which overlooked the broad meadows of that stream, and though always a brigand, hunting on the farms of others, he could not and would not allow any poaching on the lands which he controlled. He was not easily excited, he was not easily afraid, he was not so timid but what he would draw profit from his own family as quickly as he would from a stranger. He absolutely refused to take a rest for rest's sake, as time so much wasted. His breath was ripened with the ozone of the morning, the evening dews brought healing to his tired feet. He had no vices. He did not know there was a saloon. He had no religion, he did not know or care for a church, and it was an even thing with him whether it pointed to hell or Heaven. If he could have believed he was a child of Heaven he would not have cared to return to his Father's house. He worshipped the senses—the altar stairs without the altar. Sight and sound and feeling were the harmonies.

They were the three graces which brought him deliverance. They sat at his table, they followed him into the fields. They rounded up his days of labor, they checked up his days of sport. The quiver of a duck's wing was more potent than an angel's. Feathers overbore faith. What the eye had not seen nor the ear heard were the discords. Such men ought never to grow old' for when the eye is unable to supply vision, or hearing to pick up the lost chords, from being skeptics of others they become skeptics of themselves. In time after he was sixty years of age he left his family a mile away and crossed the river, not the Styx whose barge made such chastened music to the immortals, nor with the ghostly Charon to ferry him, but his own son-in-law who passed him to a land he had chosen where an unsympathetic wife would not despoil him of the fruits of his labor, nor swallow up his economies, and where the ducks might visit him always, and so he says they do.

We cannot at this time refrain from commenting upon the character of the great army of those who have taken up hunting for a profit. With two or three notable exceptions, I cannot find that their lives have been sweet or savory, or that they have served any high or beneficent purpose upon their contemporaries. One only of them all was, I deemed, a representative man, of broad and liberal nature, sharing at one time the confidence of all men, using his gifts as God gave him to use, a pronounced Christian, who, in the day of peril, to avoid payment of debt, abandoned his post and between two days started on his long journey to the Pacific coast, as says the bard,

"When you and I and all of us fell down
And bloody treason triumphed over us."

We were shocked. For a long time nothing was heard from him. Then he authorized his brother to go around to his creditors and offer them twenty-five cents on the dollar. Out on such outrage! Better offer nothing and be bankrupt than to couple the offer with the assurance that he was able to do better, but would not. Some men are born with great natural abilities. They go into battle with polished guns and shining helmets, which are too heavy for them, and they are borne down early in the struggle, and abandon their guns and accoutrements and stand trembling before defeat. They drop into an ambulance when they should ride in the band wagon, and they drive heavily through the mud and mire of stirring columns which ride on before them, and with cheer and shout lead the way to San Juan. The others are clog men who follow behind, whose vices betray them into weakness, or their faith is thrown away in the presence of disaster. There is another kind whose weapons are light but effective, who take just stores enough to last on their journey, who seize the first and fastest conveyance they can get hold of, covering years with moments, and with flying steed break into wavering columns and summon them to victory, gaining the salvos of a nation and the applause of history. The first of these represents George Beers. I was with him on the ridge between the Twin Lakes in Loraine when he shot off his thumb, and helped to get him home again. I think the weights he carried were too heavy. He was a bad disciplinarian, but that was no excuse for shifting his burden on others and then mockingly abandoning them to the struggle. He was a bad financier, and bad financiering and bad morals are almost synonymous. Such men float easily along on the stream of good luck, as they call it, when it passes their way, and become too exalted over success. With the ebb tide they fall back into the trough of their many wasting burdens again. I cannot see that their calamities came from carrying a gun. Often I have thought they came because they did *not* carry it. For many years Hunting was more profitable than farm work, and was as good as a trade. Money was made easy and spent freely. Such men pair their vices with their virtues, and hope to balance the account, but vices are negatives, they start at zero and go downward, and denote the absence rather than the expression of values and the results are faulty and uncommercial, and the stain is unatoned. The glow of the outer world and the illusions of sense more largely influence youthful natures which have learned only physical wants, as in the case of the boy who, on coming out of a devotional meeting, said to his mother, "They didn't bring me any cheese, Ma, they sang bringing in the cheese (sheaves)." All natures require the counterpoise of moral forces or dry rot supervenes. "I know men," said Napoleon Bonaparte, "but Jesus Christ was not a man." You may dig deep in the earth and channel the foundations and superimpose the tints of flowers and the breath of summer, but the hydraulic process must go on and the fountains be reached or our labor is lost. No business can flourish where intemperance knocks at the door and is let in. Only healthy, robust natures can stand the strain of hard travels and uncertain fare which hunters must endure, and in the relaxation they are fain to cultivate the saloons where morality is constricted and disease blossoms and sheds its baleful fruit among families and firesides until the want of a penny becomes that of a pound and hope dies out, and crime treads on the heels of seedy garments and unclean speech and the short life is surrendered and goes back to its Maker loaded down with judgments and the terrors of a fast coming remorse. Fifty years ago E. P. Whipple wrote, "To one who reflects on the nature and capacity of the human mind, there is something inconceivably awful in its perversions. Look at it as it comes fresh and plastic from its Maker. Look at it as it returns stained and hardened to its Maker. Conceive of a mind, a living soul, with the germs and faculties which Infinity cannot exhaust, as it first beams upon you in its glad morning of existence, quivering with life and joy, exulting in the bounding sense of its developing energies, beautiful and brave and generous and joyous and free. The clear pure spirit, bathed in the auroral light of its unconscious immortality, and then follow it in its dark passage through life as it stifles and kills every aspiration and inspiration of its being, until it becomes a dead soul entombed in a living frame." So many with a florid countenance of apparent freshness, not only try to deceive others but often deceive themselves. A drunkard once reeled to Mr. Whitefield and said, "I am one of your converts." "I believe you are," was the reply, "for you are certainly none of God's." Men cultivate companionship often of the most sordid kind. The Prisoner of Chillon would not have been loth to leave his prison walls if he had not become acquainted with spiders and flies.

Of all the hunters I have known with but one or two exceptions, none of them had a moderately cultivated taste. As Wordsworth says,

"A primrose by the river's brim,
A yellow primrose was to him,
And it was nothing more."

It is related of Sir Walter Scott that in company with his wife he was crossing the fields when the lambs began to skip and play before them. On which Scott remarked on the beautiful sight and how nice the lambs were, and she replied that "they were nice when boiled." A big butcher once remarked to Dr. Johnson, as if to gain that writer's applause, "Who rules o'er freemen, must himself be free." The Doctor surprised him by saying, "Rank nonsense, as well say 'Who slays fat oxen must himself be fat.' "

There are two things that war against a man's better nature, vices or passions, and apparent personal interest. The vices every man will tell you what they are, but they belong only to his neighbor. The interests of a man are not always what they seem to be, but either through a mental cloud or perverse or inactive conscience, the properties which should make him better are declined for those which please him or bring immediate rewards. In a large sense money outweighs all other things, but there are other tangible values which everyone calls his interests which he must protect, and these, with the great mass of men, are not moral forces at all. Everybody can observe what friendships are formed by trade which puts money into the hands of those who are eager to reciprocate profits, but not sentiments or association. A few dollars judiciously distributed has saved many a man from prison, if not from the gallows. This is what keeps your saloons alive—they pay. This is what keeps up companionship with ourselves when otherwise we are ready to say that all is gone. If we could strip ourselves of this self entanglement and be guided only by what was our real interest, rather than the makeshift of what appears to be so, this robe of ours would be brightened up and the sublime glories would reach us, and not the glittering baubles which shut them from our hearts. I would not like to sorrow as those who have no hope, but I see the clouds forming, and though the showers may do us no harm and the rainbow may follow, a whirlwind may be in store when the foundations are insecure, and disaster may whiten the fields with wreckage instead of the burden of harvest. The late Charles Blish of this city was wont to declare "The present generation is doomed. When I see young men with no visible means of support, wasting their time and energies with traveling expenses far beyond their means, which I would not think of contracting, and the round of entertainments which fills out their days and nights and draws upon limited purses and must be met often by dishonesty and crime, or entailed upon the thrift of ancestors, I know they are without hope." We may well see that this evil lies deeper than the surface. Though every man's pocket was lined with gold, a good man does not spring upon the world because of great treasure. More often the presence of great wealth is a handicap which only the few turn to profitable account.

There is a widespread defection from the high standard of morals today which is beginning to bear fruit. You can hardly trust your neighbor, you are not sure of yourself. If you have a valuable interest it must be secured by some surety which places the responsibility farther back than its source. Why not trust the principal rather than the surety who must be paid therefor? Simply because the moral sense of the former is only a creature of law, and is subject to attack. There would be no attack if there had been no failure, but why fail? Every material thing that is needed to do business is around you. Capital and labor wait on the man with a purpose, and they follow him around and plead for opportunity. From whence, then, does honesty of purpose come? It must come from an informed and cultivated conscience, and that conscience must be the basis of your everyday acts. This will forbid your accepting any kind of property without gift or payment, and any speculation which involves surety. This is not a chance world in which you reap what you do not sow. Otherwise no human life could exist, or anything which is on the earth wrought out by man. "Two things," said the great astronomer Kepler, "fill me with wonder and amazement, the starry heavens above, and the moral nature within man." Look up, oh man, at the heavens, and see if you can unfold the riddle of the stars. The Rosetta Stone in the Delta of the Nile unlocked the hieroglyphics of Egypt. The Infinite which presides all around you and beats upon thrones and wastes their pomp and glory in oblivion will not open with a finite key. More than two thousand years have passed since the prophet foretold that "no more a Prince shall sit on the throne of Egypt." Can you tell where the Prophet derived his knowledge which has been verified to this day? The world stupefied with sin cries out for God. The French Revolution which struck down all morals was forced to declare that if there was no God it would be compelled to invent one. Now we are fast reaching that point. Reverence is dying out, the chill and the gloom of the churches is arrayed by insincere partisans against the hope and faith which seeks to draw all men into honest and consecrated lives. If you forget this you trample upon your own instincts. The failure of this man or that man will not help you, for all good and worthy things have counterfeits, and it would surpass all record if some Judas or Simon did not take the life or solicit the franchises of our Lord. To believe is to be chastened with whips. To not believe is to be chastised with scorpions.

The public conscience is the greatest criminal we have in these times. Neither the caitiff did [illegible] nor the he and she Silverman has very far exceeded the bounds of the kingdom which society allows to offenders. What a roost of unclean birds! But the business methods of business men in this country produces a new batch of conspirators as fast as the old are cleaned up. The apathy of most men whose interests are not at stake is astounding. A laugh will intimidate the strongest resolution, but a laugh at crime is criminal. Forgery and perjury are bought with a golden girdle which the poor aspirant thinks will make him a rainbow after the storm of sin has ceased for a season. Mental reservation will cover up some acts, but it will not drive out consumption, the sputum of which is in everybody's throat. The unawed and uncompromising stamina we once had has lost citizenship. The penalties for violated rights in this life ought in some way to be compatible with the punishment which shall follow hereafter, else there is no hell, conscience is a misnomer, and our ideas of right and wrong are confused and calamitous.

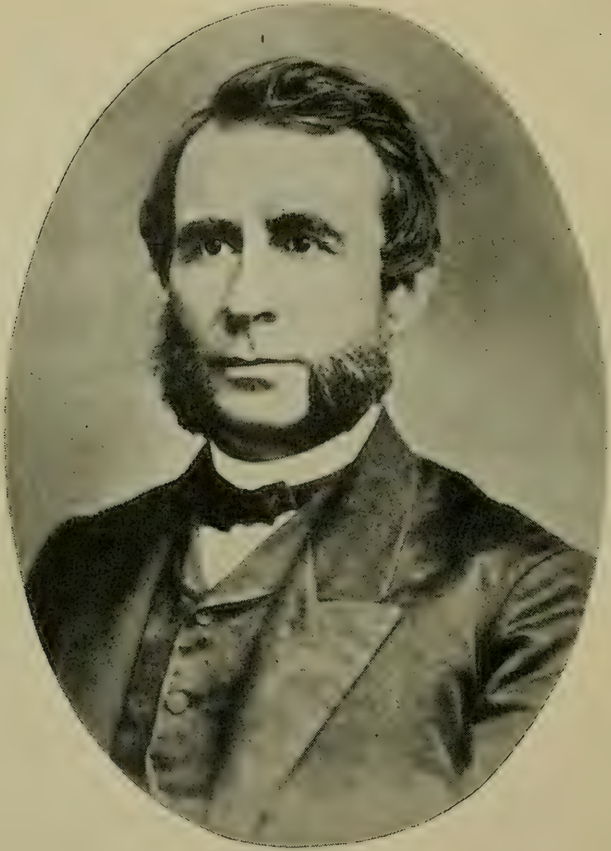
Do not think that patriotism is the highest type of valor. There are greater victories than battle flags. There are sieges once begun which never end, bloodless because they reach where flesh and blood can never come. The moral stalwart is not here, he is risen and will hardly be found this side of Galilee. Self-abnegation stands at the door of every perfect soul. Until you can reach that goal you cannot enter in. The lions of St. Mark were not those which had crunched human flesh. The eagles that were borne along the Rhine had never screamed in their native haunts of Thessaly or Piedmont. The only selfish thing in the world is the rainbow which permits you to see it only at your angle. The only selfish thing in the universe is Heaven which you shall see for yourself and not another, but of this selfishness may we all receive and grace for grace.

When that which is perfect shall come, selfishness shall cease to be an unholy passion, for there is no rivalry where there are no possessions and no emotions to betray where they are cradled in love.

It would be impossible to describe all who have been associated with us since this history began; the Fronks, the Hiserodts, the Joles, Clements and Runnels, and the vast army who have come and gone, and many who are now out of reach of sound or voice, the Choir Invisible, but memory of whom is fragrant with the good and tolerant of the bad in human character, and whose varied ideals have gone to make up the ebb and flow, the contracting and expanding of the activities which everyday life vests in us, and to all such we send greeting. We greet many more beyond the reach and limits of Henry County, many of whom we have not seen and yet loved, from distant states, from beyond the great rivers where the heats scorch and wither, where the sands blister the feet of the traveler and the winds carrying the breath of volcanoes suck out the life of every living thing. There are the wards of the Nation, whose only school of discipline is the vices, who are barred from many of the benefits which their land produces. The Indian lands are overflowing with chickens and quail, but the white man is the only referee they have whether they shall kill and market what they have fed and protected in their fields. Most of them are very poor, and if they could market the game of that region it would be an immense benefit to them in becoming good citizens.

In this record very little has been said of the men who were my consignees, of whom we have often spoken, who always rejoiced when success overtook us and sympathized with us when defeated, and have now, one and all of the great trio whom we shall name, entered that fixed abode where the panorama of this life is an ineffaceable reality. It is with pleasure I lay this wreath of many threads and fibres of memory at the little shrine by the wayside where the wayfarer can linger and where the virtues of each shall be recounted to the traveler, and where faults (as who has none?) be left to that charity which never faileth, at the fountain which they unlocked, and drinking of its clear crystal waters may go forth refreshed.

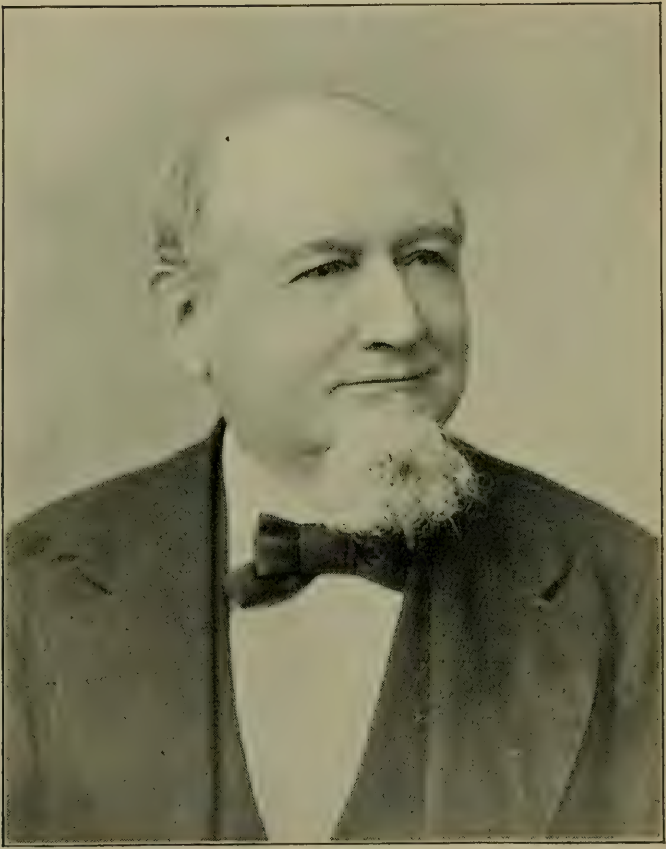
John A. Lyon was Nature's nobleman. He was absolutely void of cheat or deceit. For thirty-five years I knew him intimately, examined his books many times on points which others might have desired to conceal, and he was the same unflinching, unreserved man he was when I first knew him. He made mistakes in figures, but I never saw him feel worse than when the mistake was in his favor. In this case he could not sleep, he could not lie still till he knew what the mistake was and the correction was made. If others made mistakes against him he made no note of it beyond the time it occurred, and he would not ask reparation unless the mistake



John A. Lyon, the Incorruptible.

was very great. He was close, careful and methodical, and never let his expenses outrun his income. When I last saw him, about 1889, I was troubled because I could not seem to obtain clear insight into his feelings, and when the conversation was the most earnest and animated he would often lapse into silence, as though he did not understand what I was saying. He would not remember what I had said when I repeated it, and his eyes had that far away look which was as if seeking to penetrate the invisible. I thought then, and still think he was wrapt with a vision which was unfolding to him the world of spiritual life which seemed to belittle all the transactions of this. It may have come to him that his life was drawing near to a close, and that the dawn of a better morning beyond the hill tops was soon to clasp him in its munificent embrace. (I shall see him but not now. I shall behold him but not nigh, for he has entered in through the gates into the city.)

Of Amos Robbins, the acting manager of the firm of A. & E. Robbins, I shall speak briefly. He was not a man to inspire emotion. If you had any tender sympathies, any weakness of nerves which you could not restrain, you had to cast them aside in his presence. He was a colossus of finance and where he went Love withdrew. He warned you in advance if you had any love not to imperil it on him. He was a Harriman or a Hill, financing great measures which the common crowd knew nothing about. In his department his sway was absolute. All the managers of restaurants and hotels looked to him for their game. When he told them to drop one kind, it was done. When he told them to take up another it was done without asking why. He bought the best that money could buy and he would not put out on a good customer anything which he knew in any sense was inferior. He had abundant capital. He paid magnificently for what he bought if it suited him. He speculated on the market whenever he had an opportunity and seldom speculated unwisely. If he caught the market short of what he had, no price would permit a short to slip into cover unharmed. He made his own combination of circumstances and worked them



Amos Robbins, the Cæsar.

out with a vigor that needed no outside help. Under such circumstances it was necessary that a shipper should not place his life in his hands, so that when the stars in their courses fought for him as they did for Sisera and were moved out of their orbits by his tremendous mechanism, they could be drawn back again without your life being at stake. We had a foil, two of them. The one was John A. Lyon and the other was Edward

Sumner. Neither of them carried any large capital but they were intelligent, industrious students of values when prices were persistently under valued, and many times the prices rebounded on the street within a few moments, or minutes, or hours, and no one could tell why. Amos Robbins made a fortune for the firm and enough for himself, but it was not large. He was of a convivial nature and vast sums were said to have been expended in his entertainments. Nevertheless no man could do as that man. He was head and shoulders above all that went before him, and none after him have been able to follow in his steps. The moment he was dead the game business was palsied, and the prices which for long years waited on his footsteps were rudely cast aside. No man could place them where they could command such firmness as he himself. He handled the market as a tradesman would handle his wares, selling them when and where they should be sold. There was but one Robbins, there will not be another. All the rest are pygmies, sitting around camp fires and telling idle tales, whilst he with higher range of vision and keener insight swept the field of his chosen industry with the wand of a magician, filled up his coffers with the quiet assurance of one bred to millions, and died the undisputed peer of the field he had won.

Of Edward Sumner it may be said that he soon saw what Fulton Market was doing and he set about to draw some of the trade from there into Washington Market. He was interested largely in poultry and game. He was a shrewd calculator of values that were and were going to be, and in time he put his attention more fully into the game business. Beyond one or two mistakes, one of which

Edward Sumner, the Student.

at least was a heavy one, he was as good a man to trade with as I ever would want. I believe he was an honest trader, though his language was so vile and offensive you would at times feel justified to dispute it. He was a thoroughly competent judge of different kinds of game he handled. It was said of him that he would take a frozen snipe, chew it up without cooking, so he could tell whether it would thaw out sweet or not. Without the mistakes mentioned he might have become a power in Washington Market. He was a splendid penman. From no man was I more pleased to get correspondence. He did not talk much from guesses. He was willing to give you all the good points that should govern your shipments but you must follow your own opinions. He was a tireless writer on every occasion you needed to hear from him. He would pay drafts to the bottom dollar apparently and he was never whining about it and sending you mean notices of what he would or would not do. In this way he discounted many commission men, who get into a fever when their bank account runs low and a draft would mean bankruptcy. Sumner talked everything, filthy beyond endurance or description, and never seemed to think it was out of place. In earlier years I did not much notice it and I do not think he indulged in it quite so freely. Something must be allowed for the society around him, for market men are proverbially foolish and filthy talkers, and they do not seem to notice the effect of it themselves. With such an active dealer in each market and a commission man on the street, that person was fortunate who had the benefit of their united efforts. These three men all died within two or three years, not far from 1890, and bitterly have I felt their loss.

The Great West has seen but one happy hunting ground. We do not know where it will ever find another. Henry County, in the Valley of the Mississippi, has held more game than any land of its size in the world. If the myriads that have possessed it should lift up their wings like the cherubim in Ezekiel, the thunders of their voices would drown Niagara. What happiness and untold benefit it has brought to millions; what tables have been garnished all over the East as well as the West with the rich fruits of the hunter's labor. What other department of business has so well represented an united country where the benefit of one State was the happy heritage of all. Now, the States are antagonistic, the Commonwealth is no longer preserved. To those of us who have passed the meridian of life, feeling the approaches of age, the game campaign of the past will *not* soon be forgotten. Many will come to hear our story and forget themselves listening to the narration. The half has not been told, but enough to mark the thirty years during which the game birds of the country passed away. Many mementoes of rare sport will doubtless be treasured by each one of you. The old gun will awake new energies, its antiquated style will recall pleasant memories, they will sing its doxology, they will utter a new dispensation, they will follow you in your quiet hours, they will fasten upon your dreams. Along the Green and Rock Rivers, the wide Mississippi and the bays and bends of the Illinois, you will hear the chant of the waters anew. The grandchild will come to take your place. Like the schoolmaster, you will "shoulder your crutch and show how fields were won." You will oil well the old stock, you will smooth down the rusty barrels. If Homer is to be believed, Ulysses thought as much of polishing his splendid armor as he did of victory. "With my staff," said Jacob, "I passed over this Jordan." On the banks of the Tiber stood the Temple of Janus, where the victorious Roman Generals hung up their trophies of war. Oh, Father Tiber, in this Western Hemisphere, where the great waters gather and pass on to the ocean, there are multitudes of arms which hang over quiet firesides, which illustrate the deeds and daring and the energy of those who never shed human blood or heard the pæans of victory. Their Temple of Janus is closed for it is a time of peace, where neither sorrow nor the taint of battle shall ever rise up to darken their souls.

In all my acquaintances with hunters I have been compelled to mark their defects, but there was always a brighter side which was more or less obscured. I know of very few of them, but what if they had chosen could have reached higher walks of life, persistently and deliberately attempted. Hunting was looked upon as so much of a pleasure that the immense toil and labor endured was not counted. To those who have brawn and muscle to use or develop what is now to take its place? Such must either work for themselves or work for others. The latter may do and with the great crowd of dependents must do, but it is to the last a species of slavery and so far must appear debasing. Master and owner are not very far apart in the world's measure. To make a start is the struggle, to make the first thousand dollars is the tirumph. Passions are not evil when they prompt to good purposes, but their appeals are not mostly that way, but rather for pleasure, when they are like water sprouts which forage upon the ascending sap. A clothesline will hang you if you give it play. The summons of sense bring great disquiet where they are not opposed. In the organic world success follows the line of cleavage or the line of least resistance but in the human organism it is different. Here dogged determination must be the rule. The solicitations of pleasure must be answered with a frown. Barriers must be broken down in attack. Outposts must be set up when besieged; the spy with honeyed words must be executed, and you must climb the hill though it means a Waterloo. If you frown at misfortune your wife will call you a blockhead and give you only a wooden wedding.

Withal, be not too sanguine in the belief that there are acres of diamonds lying all around you. It is not true, it is only a rhetorical exaggeration and if followed will bring you disappointment. Competition is too bitter, the resources of your ancestors have been already coined, and the mine is worked out. The reserves are put away in a strong box which you cannot reach. Look about you and you will see the holes from which your fortunate progenitors digged with such assiduity. Though you had the making of an Astor the fur bearers are not working night and day to enrich your coffers. The construction of railways by the elder Vanderbilt and the wrecking of others by Gould brought no sinecure to their successors. The pioneers of Sutter's ranch left no shrub or bush unshaken for you to find a gold mine. Uncle Sam's farms are passing, the best are already gone. The Dantes and the Miltons, should they again appear, would find no new phraseology to depict Heaven or Hell. Wealth is cautious and conservative and its favors falls only to its friends. Societies will open the door only when you present the right key, without which the parlors that entertain not commoners but the distinguished of every name, will utter, "Procul, O Procul profani." The Rose of Sharon is too thinly planted to make picturesque highways and entice you with its fragrance, "and utterly to destroy" means that "the Canaanite is still in the land," the enemy is still sowing tares which cannot be rooted up till the restitution of all things, and until which time there can be no sudden or universal return to God. The roads most traveled are those which end in a squirrel track at last and run up a tree.

There is no more useful animal to the hunter at all times than the dog, while he is the better half in all warm weather shooting. Fortunately we had need of but four, of which only one bore the larger part of the burden. The first one ended his life on the banks of the Green River in Massachusetts, that stream which Bryant has immortalized in poetry. The second was worn out and gave up at the mouth of the Apple River, a few miles above Savannah. The third was my pride and joy for many years, a noble dog, than which nothing pleased him better than the sight of a gun and a man to carry it. His scent was remarkably keen and strong. He knew everything that could be known about a woodcock, all that a dog's nature could understand. He had pointed out thousands of them, wondering many times, as it seemed to me, when he would turn the white of his eye around with so much earnestness, why I did not see what he saw, and smelt so keenly, and when at last I was compelled to order him to put up the bird, as it rose many times he caught it before it escaped from the bushes. When once the bird was killed he was satisfied and passed on for more birds, and for many a long and weary day he never tired out. He was equally well with snipe, or partridge, or quail, or grouse, but his long hunts were mostly with woodcock. He was a short, compact dog of dark color, mixed with white spots, a very short tail, not a very large dog, and a pointer. You could trust him when going across the country to tell you all the game that was within his reach. When he discovered a bird he would stop squarely without stirring, looking back occasionally with that inquisitive eye of his to see if you were going to follow him. If you did not and he saw you were driving away, he would make a quick run, put up the bird he was pointing and then put after you with all his might to overtake you. This was Sancho, and his death was painful to me and somewhat dramatic. He was working closely along a high, dry ridge with the open below but bushes towering high overhead. Below me was an open stretch of low ground, and below the limbs an open space through which you could shoot. He found a bird and I ordered him to put it up. The bird, instead of springing up through the bushes, as they ordinarily do, dodged under the limbs out into the open way and swung around to my left to gain the high land again. I was not over ten or twelve feet from the dog and as the bird passed in the open he came just opposite the dog, and my eye following the bird I did not notice Sancho, and the charge struck him squarely sideways, and the poor brute made a low whine, trying to come to me, and fell dead. I left the place with a sad heart and long afterwards tried to locate the spot, but everything had vanished that reminded me of him. He was with me five or six years. He lies below Cassville five or six miles, along a highway where the wood teams pass and repass every day, not far from the Milk Slough so often spoken of. He was nearly worn out at this time. The fourth and last dog was with us on the boat in 1871 while we were encamped opposite the mouth of the Wisconsin River. I had shot a bird which he did not seem to find, and was scolding him a little when he struck and soon left me on the Island. I returned in the evening but saw no more of him. In the morning we heard the bay of a dog and looking across the Mississippi we beheld him on the Southern shore of the Wisconsin and looking pitifully across to us. We recrossed and took him back to the boat where later I sold him to one of the hunters and I never saw him again.

There is a characteristic feature among bird dogs which is not easy to understand. There are times when they are in the best of condition, when they see the bird fall and rush madly after it if allowed and if they do not strike the scent at once they give a turn or two and come back discouraged. No persuasion or allurement of any kind will prevail with them afterward. They will lead away readily to fresh fields or pastures new, but they will not hunt up the lost bird. It is not, however, a dead bird, but its wing is broken and the general opinion seems to prevail that it is able to hold back its scent and remains perfectly still where the bird falls. I have had this happen repeatedly on chickens, quails, partridges and woodcock, and it is most exasperating. Once at the mouth of Penny Slough a partridge rose up the hill and I saw him fall. The dog lead out after him, gave two or three quick turns and came back without it. The grass was short here and the wind blew strongly, which might have dissipated the scent. If the habits of the partridge were like that of a chicken, it begins to run the moment it strikes the ground, and if the dog starts right on its trail it will follow it any distance, even where the ground is bare. I have had my dog follow a partridge in Wisconsin for a quarter of a mile before it was overtaken, and walk steadily on without a break from first to last. The dog is the most devoted friend a man has. While attaching himself to one man alone he will hunt until his feet are all worn out and bleeding and until he can travel no longer, but of all things a bird dog abhors is the presence of sand burrs. I had never seen any till I hunted North of Annawan. On those sandy hills they are in great profusion and were then at that time much frequented by chickens. We were not successful at first and my dog began to show some disappointment when suddenly he slacked up, went slower and had every appearance of a horse that was collicky or foundered. He held his tail, not straight out, but circular, and he lifted his feet like they do when they find squirrels or a turtle. I drew up, supposing he had found something, but I was mistaken. I remembered the city hunter who was represented as following up a dog pointing all the while, upon which he cried in despair that if he kept up that thing all day he would get no partridges. The dog's eye was raised appealingly toward me when it flashed into my mind that he had struck a nest of sand burrs. I examined the dog's feet and all between his toes were filled in with them, and I had to pick them all out and leave the neighborhood.

Two horses I wore out completely, one crossing the burning sands below Savannah on my way to that city yielded up his life the night after I got there, and the last, worn out with age and labor, died here in this city twenty-five years old. He learned to do everything a hunting horse could possibly do. He would see a chicken on a fence as quick as I would and you did not have to tell him when to stop, for he did that of his own accord. You could leave him anywhere in the fields from nine o'clock in the morning till six o'clock at night without fastening, and you would find him when you wanted to return home. He died at last of old age.

What shall be said of the future of game and the game business? In Illinois game birds are becoming a thing of the past. It seems incredible did we not know that the last ten years have done more havoc in the flocks than the thirty years which preceded it. Up to 1892 or 1893 jacksnipe could be had almost anywhere in the spring or fall. We calculated there was killed in Illinois in those thirty years no less than two thousand dozen each year, and the market was large enough to take and consume them all at paying prices. For the same time there was marketed each year from Henry County and the Mississippi no less than three or four hundred dozen woodcock, and the average price was as high or higher than now. Quails were all over the state on high or low grounds, in the woods and in the corn fields, and were so universal it would be difficult to give an estimate, but the number killed must have been very large. Prairie chickens have been in limited supply for the last thirty years, but they were never nearly as scarce as now, the low bottom lands being their only place to nest, and these overflowed with water, most of the covies perished. There have been very few grass or golden plover killed since 1880. Very few ducks nest here now. In the dry years very few are seen or killed. This year of great abundance of water, there ought to be plenty, but they are not. We have reason to believe they have emigrated with the geese and brants and cranes and traverse in their flights long distances to lands which have not been open to the hunters. To keep any appreciable amount of game in this country we shall have to follow the practice of English lords of great estates. Land in severalty of small compass will not hold birds that roam over vast acres and belong to no man in particular. And here comes in the difficulty with the law. When it is conceded that all the game in the State is owned by Government, how shall private individuals make their tenure good so they can hunt at will. Such people will be able to keep poachers off their land, but if they kill are they not poachers themselves? It would seem as though the proper way to do would be to give all hunters a fair chance and equal so long as the game would permit without destruction, and allow it to be shipped as long as it was legal to kill, when all the rights of citizens in distant states would be protected. It would only be proper to throw the law open once in quite distant years when the supply of game would not be interferred with because the flocks would not stand constant or yearly pursuit.

The rage for hunting seems to have gone beyond all reasonable bounds. It has always been believed that the scarcer the game the less the demand would be made upon it. A hunt that would bring in two or three dozen birds was supposed to have no allurements where it was reduced to two or three, but the fact remains that the enthusiasm is unabated where men hunt for sport, and actually the value of the game killed is often less than the cost of killing. Men are getting used to small bags and they do not weep over the expected. In New York State the killing of one or two woodcock a day was not discouraging and to kill three or four or more was an eye-opener. The man that shoots for profit cannot work himself down to this low average. Consequently he is not a factor when scarcity is apparent or prices are low. It would seem that laws could be made according to the promise of the crop every few years, in which every man that chose could share. It might be proper to have open season most every year if the killing was allowed and followed at the proper time and then only, but no prairie chicken should be killed in Illinois until October, and even November would be preferable. When the corn fields are bare and the snow is piling up in the meadows and swirling along the valleys, not many birds would be reached. It might be proper to kill them until February and nothing would suffer. The question might be raised whether the summer shooting has not done more harm than all the laws have done good. The killing of summer birds has run into the millions in Iowa and Nebraska and Minnesota, and in Illinois has approximated a ratio nearly as great. There has been no real winter shooting in Illinois for thirty years. Then all the surplus has been drawn off in warm weather and a large share of it was lost or damaged. Let us get at the cause where it lies and not charge it up to professional hunters who are seldom interested because it is unprofitable. Look at the crowds of hunters and dogs that sally forth every first day of September in the chicken states, and tell us if it is not remarkable that any birds remain there at all. Don't tell us of the noble sport enjoyed by these knights of the gun, when, oh ye lawmakers, it is nothing short of murder. We often hear it remarked by young Nimrods, and older ones as well, that it is highly objectionable to shoot birds sitting, but it is rather commendable to flush them first and give them some chance to escape. Their theory is untenable, unless while they slaughter young birds by the thousand in hot weather, too small to take care of themselves, they can show it is merciful. It is a fraud upon legislators to permit such laws to pass. What a cry is raised over the destruction of whole broods of quails, sometimes, and at some fortunate shot. Nevertheless, the same persons will sally out where a flock is known to use and kill two or three, or perhaps half a dozen, rest awhile, then pursue them again a few days later till every bird is gone. I well remember a hawk which had marked a flock of quails on the bank of a stream, and made a dash among them every day or two, capturing one at a time till the whole brood disappeared long before spring. It is a persistent following of the flock, whether one or more is killed at a time, that wipes out the brood. The hunter for profit does not do this. If he gets among them he probably kills half the flock at the first onset, then passes to other grounds that have not been disturbed. He can no more think of spending his time upon remnants of flocks than he could expect half a meal to keep him alive. When the surplus has become reduced he moves away. Did you ever know a pasteboard and gingersnap sport ever to say he had killed enough and would take no more. Possibly the law might compel them to limit their killing, otherwise their appetite is unsatiable. Look over the best hunting grounds in Henry County, the best that have ever existed, and I think you will find that if anyone has killed game illegally it has not been an up and down hunter who hunted for profit. It would not be to his interest to do so. From a partial comparison of quail grounds which have been shot over each year with those hunted over every other year, the number of birds killed in the former was noticeably no less than in the latter. It seems to be a law of Nature that whole broods do not thrive like broken ones. After a cold winter in which only here and there was a flock saved it seems remarkable how soon the hunting was restored over large areas. The last hard winter we had here there was not known a single flock to survive. Nevertheless when spring opened the voice of the quail was heard in our land, and even now, if the old covers of grass and bushes could be restored, the supply would soon be inexhaustible. This is the natural home of chickens and quail. The boom of the former was everywhere heard on the prairies in the spring, quail compassed this city within half a mile, prairie chickens were taken plentifully where the Boss Works are now; on the old cemetery grounds the fences were filled with them when snow flew. Quail roamed the streets in October and often appeared in the spring. Partridges flew into the houses every fall. Woodcock were plenty in the Blish woods in October. They have been known to feed in our dooryard. The present generation cannot understand this: it thinks a holiday necessary to find a few birds. We think because the conditions are so much changed for the worse that the numbers of game birds have lessened and made it impossible to restore them again. We shall never see many woodcock in this country hereafter. The growth of cities, the spread of railroads and the drainage of wet lands makes their stay impossible; very few are to be found on the Mississippi at present. In Henry County they were practically weeded out in ten years after the hunting of them commenced. On the Missouri there have never been many. The farthest west we ever got any number was in the neighborhood of Columbus, Nebraska. I have searched many miles for them along the Missouri and never flushed one, but there are certainly some there. The Mississippi is slowly drying up, as every traveler knows. The streams which are its natural feeders have been opened to the sun and evaporation and drainage have carried off the surplus which was meant for use all summer. The water sheds have augmented their capacities, the wooden coverts have diminished theirs. Cattle roam over the islands in numbers where in the 60's they were scarcely to be seen. Railroads travel the farthest limits and along the valleys on both sides. Hunters come from everywhere and drop off anywhere where birds are to be found. Egress and ingress are easy, and even with strict laws hunters get most of the game. If there was none killed in the South it is not certain any considerable number would breed with us during the summer, but within the last few years hunting has rapidly increased in the South and in an alarming manner for both woodcock and snipe. Woodcock are especially sought after, and in the absence of the former the latter is taken. Woodcocks are confined entirely to wooded districts and they fill the bill so completely from their large size and fine quality that very few are left to return to us in the spring. Southern jacksnipe are uniformly poor, and feeding as they do on wild, uncultivated lands and extensive areas, they are not so easily obtained. If they could be had in numbers, the Eastern markets doubtless would take them all, where more northern birds and those of better flesh could not be had. In Illinois they will soon become so scarce they will cease to be hunted. With the present laws large fat birds cannot be had in the spring when they are at their best. The 20th of April they begin to fatten and by the 1st of May are outlawed. The fall birds are mostly poor and have to be held for a market. Both grass and golden plover have disappeared from Henry County. There is no known country where they can be had in very great numbers and reached by the railroads. In Nebraska the summer grass plovers have become scarce. Ten or twelve years ago they were plenty in August. If they can be had now at all it will be in Texas, through which they pass in October and November. The hope of the partridges for the present is in Minnesota, North Dakota and in Montana. Much of these states is timber land and if the laws which now rule were enforced the birds ought to increase again for some years. The slaughter previous to the passage of the laws was beyond all computation. Enough were killed in one year for five years till the states could endure it no longer. Buyers were entirely forgetful of their own interests. No doubt they would, if allowed, have killed every bird if they could have realized ten cents each. What kind of birds have been left in Illinois that are likely to remain with us? Only chickens and quail, and of the former only a very limited number. Some help might come from the laws, but the men who hunt for sport, under some pretext, manage largely to ignore them. All talk about preserves where no man with a gun, outside of the club, will be allowed or considered, is futile. This is Englishy enough, but the theory you claim to believe in will not allow you to take and hold the property of the government.

What will become of the quail? No doubt they present the most striking instance of self-protection.

While they have lost the bushes and fields of grass with heavy cover, they have taken to the corn fields and hedges, and are *not* easily driven out, and being half domesticated they are able to nest in every small patch of grass or spurs of ridges near to dwellings and even in instances mingle with the fowls of the farm yard, and so in limited numbers may always remain. They have continued to remain in the older Eastern states, although poorly fed and pursued with great acticity.

The pigeons are gone, the ducks are going, there is no reason why they should remain. Every piece of wet land where a duck could be induced to tarry is patroled by a sentry, not with a muzzle loader or even with a single or double barrel, but the resources of the gun makers have been put to the limit to furnish a weapon that will "bark" like a dog all day or night, continuously if necessary, and whether poacher or a plunderer, whatever you might name him, he holds the key to the life of every duck that passes his neighborhood. If he gets sight of a duck he will shoot, and I have known him in his honest self-consciousness to shoot at the heavens and expect a duck.

It is time now we should come to some conclusion about this exercise which is fancifully called sport. Is it sport or is it murder? Is it noble or is it ignoble? In its last analysis, the moral character of an act must be judged by what it does or by the motive that inspired it. Doubtless to kill wild and dangerous animals would be considered right even if it produced sport. The butcher strikes down unoffending animals, but with the purpose of sustaining human life. Nevertheless on some juries he is not permitted to serve because of his familiarity with blood. To kill game for market where the public is benefited would not be considered an unjust act. We think young bloods who harness themselves up for a summer hunt where the market does not need the goods and no sale is intended of the game and where if any use is made of it it goes to personal friends who have very little need of it, it very much resembles the sport of the cowboys who run down the buffaloes. Doubtless it was sport in their way, but the bones that lined the pathway of the Union Pacific were as eloquent as those of the Christian martyrs that lie on the "Alpine mountains cold." If we ever had a year full of bitterness and crimination of ourselves it was when we hunted without a purpose and made a holocaust of dead and dying birds. It is said the Roman ladies set down in the wet arena, slippery with the blood of those who had never offended them, to a magnificent supper, and greatly enjoyed the sport. The poor Batrachian that makes himself merry in the ponds when persecuted and stoned, has been known to say, "This may be sport to you, but it is death to us." To take the blood of any living thing, purposeless or causeless, seems not to belong to the nations which call themselves civilized. The beetle—the scarbaeus of the Egyptians—the snake, the crocodile, and other inferior animals, to take the life of was not permitted, nor to be sacrificed by them. Many of the specimens were deposited in the tombs with the kings and queens of Egypt. Where courage and skill are requisite it may make a sport noble, but where skill alone is necessary, and that not of very high order, the nobility wanes and the brutal remains. Let us interpret morals in a generous manner as it becomes the wisdom and experience of the twentieth century. We are not modest enough to believe what Agrippa said unto Paul, "Much learning doth make thee mad," nor with Pope, "A little learning is a dangerous thing," because really there is nothing to be gained by the gun any longer. You may as well call back the tribes of the desert, buried by the sands of the Sirrocco. They will not answer. Wealth may build for itself preserves and parks and the general government may make poaching piracy, and every authority be invoked to convert the broad acres of our country into an English manor, and the dragnet will hold nothing but the common quail. With the passing of the wild grass of the prairies grouse will linger awhile and be lost, or like the buffalo, exist only in a few specimens. The water birds will visit us less and less every year as the water courses dry up, and will ultimately be found only in the far North.

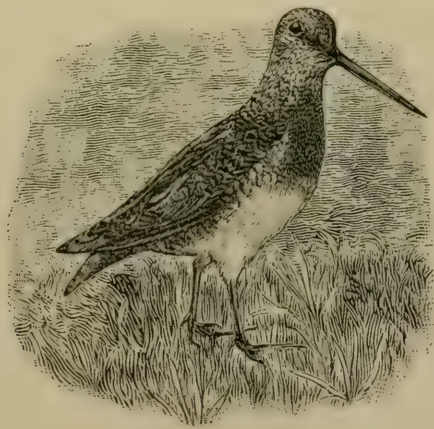
The hunter for profit has had his day, the pot shot and the pot hunter must disappear. What little game remains that you can legally take will fall into the hands of the city sport. He will outclass you because he can outbuy you. To the farmer the lot falls of raising and protecting and then of forfeiting his crop by being forbidden access to the markets of the world. There will be no markets. Where there is nothing to sell there will be no one to buy. You cannot step into another State with a gun but an officer is at your heels and demands a license or a fine. The young man with blood tingling in his veins and ambitious to distinguish himself in the field with dog and gun, must round up his energies in some other channel. Nature is lustful, ebullient, profligate, but you can dull the finest edge with a trifling hair, and while there is nothing to be gained by controversy, submission is only the price of valor, while the killing of birds for sport is so brutal Christian ethics should make it a thesis for future orations.

PART II.

GAME BIRDS OF THE MIDDLE WEST.

ENGLISH SNIPE OR JACK SNIPE.

This little bird, commonly called by market men the English snipe, should more properly be called the American snipe, as it is much smaller than the English bird, but its habits and appearances, aside from its size, are almost identical. Among sportsmen it is more generally termed the jack snipe, and from the brevity of the word that expression has come to be more common. We have no other game bird so small that has equal value with it, or that is so highly prized by epicures or lovers of ideal game. This bird is only nine to ten inches in length to the end of his bill, and rarely weighs over four ounces each. A good barrel of



English or Jack Snipe.

fifty dozen will seldom weigh over a hundred and seventy-five pounds, including the barrel of twenty pounds, and two hundred pounds would be considered heavy. To obtain over that weight it would be necessary to have all selected birds. Nevertheless some birds are obtainable in May which weigh close to six ounces and are as large as some woodcocks. They are inhabitants of slough land and marshy places where they get their living by boring for earth worms, for which their bill is highly adapted, but they cannot bore in very heavy ground or on uplands where there are no water courses. Their bill is upwards of two inches in length and flattened toward the extremity, after which it resumes its normal shape to the end. It is noticeable for having a series of little dots or indentations where the flattening occurs, and by their presence it would be impossible to confound it with any other bird. It breeds close to its type and the variations in color or form are few, so that a white feathered bird is rarely if ever seen. In general its back is variably dark and light, while its breast from the center down is nearly white. Its feet present long, thing, stright lines, and the impressions are often prominent and noticeable in muddy places, and are only distinguished by their length from the rail, which feeds also in low, marshy grounds, but with more frequent spots of water. This bird traverses the whole of North America, on the Sea Coast, on the Rivers, on the Plains, where there is much water. Up to the shores of the Arctic Ocean, in the Savannahs of the South, by the affluents of the Gulf of Mexico, by the landlocked streams which appear with the rains of spring and shrink away in the summer. Always a wanderer, coming and going within certain dates which seem to mark its passage north or south, shunning travel by day and eager to dash in at night where no sign has appeared the day before, the most determined and inexplicable little foreigner, without a country, but ready to naturalize himself wherever he makes his home. In spite of all the array of guns which come down from the walls to meet him and the steady tramp of veterans who know his voice as well as that of the brant and geese of the Spring, and salute him as they would a lost brother, with such fearful carnage, he never falters. With what magic does he rise up and utter "s-c-a-p-e," gives a few lunges in a zigzag fashion, and darts off in a straight line and sinks behind some clump he has noticed, or dips off suddenly into the flags. He may settle in the marsh where the water is too deep for you, or he may whirl around into the air, gather up one or two or more companions, and sail away, perhaps a mile or more, before he alights again. When the grass is short he is very wary but as it lengthens late in April and makes a shade for him you may walk past him within a few feet and he not take wing. He may drop down into a wagon track, entirely oblivious of you, or a cow track may form him a cover. His eye is very large and bright and he notices your every movement. If he thinks he is discovered he is up and away. He may sometimes be seen walking about in places where he is not much hunted. In back fields by small streams he may reveal himself at his own sweet will, coursing the ground and taking a snap at the worms below which furnish him his meal. In the Spring time on his arrival, if it be a cloudy day, he will rise high into the air and deliver his love notes, which can be heard for miles, whirling around in circles of lesser or greater diameter, then suddenly dropping towards the earth with the velocity of a hurricane. He will pour forth a torrent of sound with his wings resembling the scooping notes of a sky rocket, dying away in softer measures like a horn. Sometimes in company with ten or twelve others he comes down suddenly from a cloudless sky, the first of the season, in the day time. He is a rare judge of feeding grounds. Not every spot which holds water will hold him. He discovers the nature of the soil long distances, he will not tolerate cold, clammy bottoms. If he discovers a strip of fertile lands adjoining plowed fields where the worms have got in, he selects it and will have no other. On open tracts of rich soil without cover he will often tarry, but likes cover better. Where the grass is mowed short he passes it by. Where corn fields adjoin he will fly there for shelter. He will remain away in some secluded place after he has been once flushed for hours, and will only return at nightfall. He likes community but not company. He is the prince of open lands as the woodcock is prince of the woods. The first of May the female begins to nest. When it is finished and the eggs laid the old note ceases, the voice it utters is coarser and deeper, sounding more like "c-a-r-k" than "scape." It lays four eggs, mostly light brown, but speckled and tawny, and deeper stained at the larger end. When the season for shooting is past he is gone. By the tenth of May a rain storm may come on and carry him you know not whither, and he will not reappear before August, and not then if the Summer is dry. When he returns he is in poor flesh and only in favorite places does he regain the good condition he had in the

Spring before he is ready for his trip South in November.

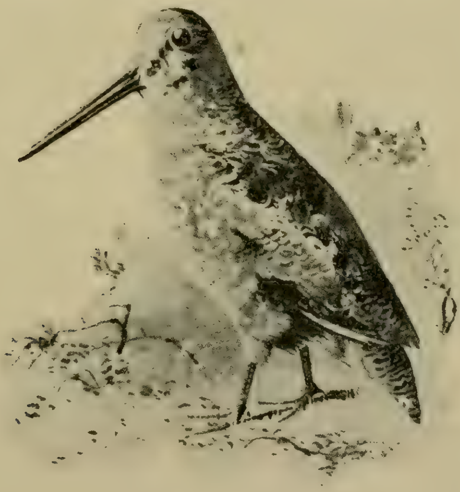
Jack snipe usually arrive in the Spring about April 1st, sometimes they are as late as the twentieth, if cold weather sets in or snow falls heavily when they arrive. In that case they are liable to remain late South and not stop in Illinois at all. The earliest birds ever known to arrive was in 1879, when they appeared quite plenty west of Annawan March 7th. Hunting of them successfully is quite a science. In windy days hunters have learned to beat down the wind, when the birds will rise upwards and give you a good shot. There is no country where greater bags have been made than in Henry County. Many times have one hundred been taken in a day and exceeded. In one case a hundred and thirty were killed in one day with a muzzle loader on Mud Creek. Southern Illinois was a fruitful haunt for them many years. The Carlyle Bottoms were famous. In Missouri, along the Chariton Bottoms, immense numbers were killed. At Beardstown and Burlington thousands were shipped. Only in the last ten years have the numbers commenced to fall off. You will not now collect in the whole State of Illinois as many as we used to get in one week in Henry County in 1860.

The travel of this bird in the Spring from the far South is in the nature of a romance. For many months he has fed at the Gulf, he may have traversed the Isthmus. He hears the beating of the Pacific, he covers the foorsteps of Balboa. Behind him the Summer, before him the screech of the wild fowl opening up the frozen fastnesses of the North. Enwrapped in the clouds of the night he plunges into the airy abyss. Headland and Mainland vanish before him. Turbulent rivers and mountain ranges disappear as if by magic. Rising cities throw out a line of light. To-day he feeds in the cotton fields, to-night he will be beyond the black belt of the bondman. The constellations with their jewelled fingers, open up the gateway of the Mississippi, he enters the vortex of commerce, he follows the coast line. He feels the breath of Spring wrestling with the chill of winter. Far below is the mad rush of bursting floods which increasing warmth has melted from their icy chains. Only the stars above him twinkle and are still. They are his handmaids, they are the lamps of Heaven. If he were in doubt of his way they would befriend him. With his practiced eye they are visible in the day time. He may hear far away the notes of the Angelic Choir. If he were a bird of song he could enter the gates. There is a power

"That guides his way along that unseen coast,
The desert and the illimitable air,
Lone wandering but not lost."

The way shortens, he is nearing the end. An indefinable sense of joy gladdens his bosom as the sun breaks forth and gilds anew the land of promise. It suffuses his being. The throbbings of parental love now surpass all his other passions. He sees beyond the little nest with the helpless ones, and with increasing delight he flies forward. To-morrow he will rest in the summer land and the home which will make him a heaven.

The American woodcock is the most charming game bird we have in our country. He is also some smaller than his English congener, but his nature and habits and general appearance are also very similar. Like the snipe, he is a bird of passage, and though he will endure some cold weather, both in coming early and returning late, he is seldom to be seen here after the middle of November or earlier than the first of April preceding. After a late snow in April you will often see his track along coverts of thick bushes which border timber lands, and by going a few steps you will easily flush him for he is not a wanderer after he reaches his summer home. His track is as smooth as though pressed in molten glass and the steps precede one another with the precision of a square or a plumb. The impression he makes is broader than that of a snipe and he is a much heavier bird. When he is in full flesh he is considered to weigh on an average about half a pound, but there are cases on record where he has reached three-quarters of a pound if not more. In October he is heavier than in Spring or Summer, and a barrel of birds in the Fall will usually weigh something between the two figures. He wastes very little in



Woodcock.

dressing, because he does not have a crop. His breast bone is thinner than a knife blade and all the exigencies of digestion are reduced to a minimum by the food he eats. Beneath his feet roam the slimy creatures which are to manufacture muscle for himself and pleasure for gourmands. His legs are remarkably large so that his rise is active and springy. His nest is formed from April 1st to July and in instances until late in September, but usually the young is nearly enough advanced to fly well by the twentieth of June. In one instance I killed a young bird the first of October barely large enough to fly and not yet full feathered. Likewise I raised a bird from his nest on the hillside along Green River the first day of April immediately following a heavy freeze, the nest containing the full number of eggs. But in June I have often driven them off their nest, while for the most part the flocks were grown and able to fly. Their nest is on higher ground than that of a snipe in most cases but I have found them on the river bottom where the rise of water would entirely overflow them. Their nest contains the same number of eggs as a snipe, four in number, and similarly spotted brown. The color of the bird is nutty brown, lighter on the breast and darker and mottled on the back and head. When he starts to rise and expands his wing and tail he is the most perfect picture of beauty; he is the flower of the air. The snipe is a pansy, the woodcock the rose of summer. The tail coverts with their ring of charming white when expanded represent the blossom. With what beautiful lines does he suggest rhythm of movement as he clears the bushes, the tree-tops, and beats his way with a cadence of flapping wings until he has crossed the sunlight and enters the shadows again. You have lost him for awhile. You may be able to find him not very far away. He sits in cover if cover can be found. He does not make merry in the sunlight. He seldom takes to the open fields. Love is an inhabitant of the rocks but he of the woods. With that marvelous eye of his he will see where men stagger. He is the most sagacious bird in existence. Where the galinaceous birds will take to the wing he sits quietly. He is the cock of the woods. If by chance you should see him alight and should follow him up intently he knows your purpose in a moment. He is not going to make a confidant of you, he will rise again before you are in reach, and he will continue to rise as long as you will follow him and worry him. But oh, young sport, beware, do not tempt him that way. Mark where he lighted and go thy way, he will not run away. He will not of his own will leave his secluded cover until nightfall. He, too, is gregarious, he has some near relation not far away. You may pursue them for awhile and then come back. He now thinks you have given up the chase. His fear is now vanished. He believes from his escape so long you will not again find him. He is to all purposes now the same bird as though you had never forced him to rise. Your dog is coursing around and he now scents him readily. He draws up slowly, yourself directly behind him. Where now are your eyes, why can't you see him? You begin to measure the ground inch by inch. You are certain as the dog hesitates he must not be six feet away, but oh, your eyes are blurred. There is a watery channel where the tears gather and you wipe the mist away. "Oh," you think rapidly, "if I could only see that bird I would shave his head off in an instant." You want him, you are not debating how you may get him nor what he is worth, but you want him, and so the plot thickens. Your dog turns up the white of his eye appealingly and cynically seems to mock you. You wait a moment. You will order him to "Put it up" if the bird does not rise soon, or you do not see him. Wonder of wonders, your eye now strikes his. With his color so similar to that of the ground you had overlooked it. Your fingers feel the trigger. The stock seems to be loose and shaky in your hand and its throbbings pass all over you, but oh, up goes the bird, with the velocity of a torrent he arises, shakes the bushes behind him and climbs the height of the limbs above. Now all your skill is to be tested. The moment he passes the top of the limbs he will be out of your sight. You make a fair shot, but you are nervous, your shot spreads but little, you shoot too quickly, or too late, and you miss him perhaps by an inch. He is out of your field of vision, or perhaps as you fired you lost sight of him. Or the limbs and leaves come raining down, there is a touch of sunlight, and on top of the leaves comes down your bird. If you miss him, he goes ten or twelve rods, then descends again, makes a sharp, straight line through the clearing, passes a thick clump of wavy bushes and congested limbs, turns suddenly to the left around a thick cover and drops down again within, when you may repeat the same process as before. If you hit him fairly well he comes down with a broken wing or perhaps with it cut off entirely, or you macerate his head and the mangled body falls into your hands all the same. The woodcock by a system of telepathy which you cannot understand, divined your intentions in a moment when he rose into the air, never stopping to inquire whether they were good or bad. This is his security that he knows how to lie still when he thinks he is not seen. I know I have passed within a few feet of many a bird and yet neither myself nor dog was able to discover him, either when entirely unhurt or crippled. They will sometimes allow you to put your feet squarely on the bog where they sit and only start up when the grass brushes against them. The sagacity of the bird is further shown by their care for their young. Many times when hunting on the Mississippi, we have landed on an Island that had until within a few days been entirely covered with water, and the woodcocks were there and young birds that could not fly. This wonder for a long time we were unable to dispel, till one day on the Rock River, just above the Railroad Bridge at Colona, I was beating the bushes south, and before I got fairly where I expected to find the birds, and talking sharply to my dog, I observed a woodcock coming out of the brush towards me with his legs hanging down and a big bunch of something held between his thighs, as it appeared to me, and I thought it very strange, because woodcocks do not move of their own accord in the sunlight and in the heat of the day. It was a female bird which made a peculiar noise with its bill very similar to their love notes in the spring, and I let the bird go till I could ascertain more about it. I went directly into the bush and she followed me and flew around me several times, and there I found all the birds of a brood but one, none of them able to fly, but a few feet, and the bird was evidently on the point of taking another in her feet and carrying it away. A chicken or a quail under such circumstances would flutter around and make a great display of anguish, but I never knew one of them to seize the young and carry it away to save it.

It has been said that woodcock never alights in a tree. Old hunters always repeat this story. Most game will alight in a tree when occasion serves, the quail, chicken and partridge being fond of so doing, but across the River from Savannah, in one of those dry, hot summers, I discovered a woodcock sitting on a stump and bowled him off, and although I had been shooting close by for an hour he did not appear to have been frightened.

At the mouth of Green River in the '60's, there was quite a body of woods, most of it on pretty high ground. I commenced the middle of June to shoot woodcock there and most of the birds lay along the muddy banks of the stream or in the sloughs that put back therefrom. I did not find as many birds as I had expected, and I followed back from the bed of the River a short distance to see if they had not flown into cover there, when suddenly I discovered a bird flying from the River towards me. I followed it up and killed it and started back to find whence it came. As I did so I passed a tree with its top broken off about twelve or fifteen feet from the ground. I heard the call of a woodcock, and looking up from the point of the stump, a whole brood, one excepted, the old bird and her young ones, came down and I got most or all of them.

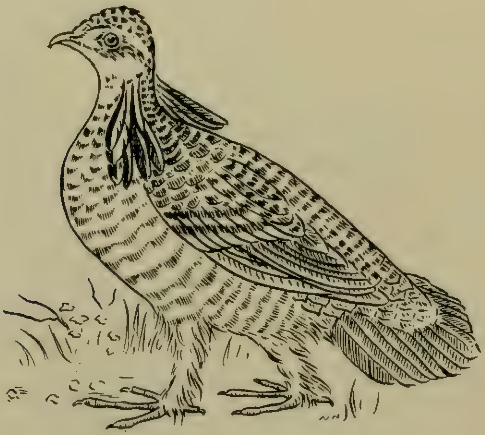
When these birds arrive in the spring they select their summer home contiguous to some swampy bottom, well watered and interspersed with trees, and soon commence their airy flights as evening comes on, rising often to great distances, and after circling around a few times, singing their love notes slowly and with sliding motion, they suddenly start into more rapid movements. The circles are diminished. Their notes are quickened and more liquid and delivered with great frequency till the syllables seem to overlap each other in their haste to escape.

The wings quiver and beat the air with tremulous motion, and the bird poises in its flight and comes down to the earth like an arrow and if you happen to be beneath him, you are in danger that he will strike you squarely on the head, but usually he turns aside, picks himself up on a bog and utters "s-p-a-t-e." I have often marked their descent and wondered how closely they came to you without quite reaching you. They will generally alight within a rod or two of you. At such times they will continue to utter their pass word for many minutes before they rise again. On my neighbor's farm in New York State, there was a side hill covered with short, stubby bushes and this was a favorite resort for these birds. They sat there during the day time and at nightfall would rise up and whirl around in the adjoining pasture, and many times I tried to intercept them as they rose, but never succeeded. One night I followed them back into the field and killed it under the hickory tree as I have described. I was as proud of that feat as I would have been in war to take the scalp of an Indian. It was no use to me, except the small taste I got when it was cooked, and it was fine, but it was on a par with much of the hunting that is practiced at this day. To kill a deer may be sport, or a bear in the wilds of Minnesota or Mississippi, may be noble, but I cannot help think it smacks of bloodthirstiness and in the end is brutal and cruel, always barring the extermination of wild animals when necessary, and your own need or choice of the means of support. We think the toreador who goes into the bull fights of Spain or Mexico to appease the cry of the populace for blood differs only in degree not quality from the hunter that pursues wild birds merely for sport. The passions in either become whetted and ferocious.

They are like milestones which, within bounds, lead to the Holy City, but if you will not stop there, there is music and dancing beyond where revelry sits in the seat of the scornful, and in the end "In Memoriam" crowns the last milestone. When in 1850 Carlyle began to develop his Thesis that real health and strength were always "unconscious," he roused the British lion to say, "What—do you think I am no longer to be rampant but couchant. Fie on you, Scotchman!" Nevertheless, this led to reverse the hostile attitude of Britain and open the way for bloodless victories to follow.

The bill of the woodcock is a marvel of adaptability. It is heavier and stronger than that of the snipe. It gradually decreases from its initial junction at the base of the bill and continues to lessen in thickness until it reaches the end. The muscular power in the bill of the woodcock is immense. While the bird feeds in soft and moist places, like the snipe, it is not confined thereto. The feathers that fringe the edge of the bill are often found covered with mud, but in places where no water is formed beneath forest trees where the sun does not penetrate, or in corn fields, it feeds often with equal facility. It will feed on dry ground, where when its bill is removed, the space fills up with dropping soil. When traveling North or South it will often stop at night in some old pasture, many individuals often in company, and probe the ground with holes for a large area, till they take their flight again. In rapidity of flight they are said to equal all other birds. It not infrequently dashes itself to death against some sharp obstacle which it cannot avoid. I once picked up a bird on the railroad track just out of Kewanee with its breast pierced through with a thorn. Where there are mountain sides no height for them is inaccessible. I have shot them in the Fall on the top of the highest mountains in Eastern New York. Once in pursuit of a partridge on a ledge hundreds of feet from the valley going sheer down its precipitous sides I rose a woodcock and killed it and in its fall it fell nearly a hundred feet below me. The scent of the woodcock is very strong. Any good dog will take it readily and the scent is not always dissipated when the bird leaves. In favorite places the dog will take it on the morrow following. It will last longer than that of any other bird. Not even a quail or a partridge will remain fresh from one day to another. This is particularly true where the bird has fed over night. In the morning before dawn he may pass to a new country and your dog draw as for a fresh bird, and not know he is gone.

The prairie chicken or prairie hen, as it is sometimes called, is the most valuable species of game we have in Illinois. Not only does it possess the flavor which many housewives seem to covet, but its large size places it in the list of eatables not very expensive when the bird breeds plentifully and the laws permit its capture, but undoubtedly the limit of production has been reached and passed here and those that expect to partake of it, will often have to go beyond the Missouri. There is always a comparison to be reckoned with between the amount of game at any time to be had and the increase and the spread of population when game is to be used as a food product. Forty years ago prairie chickens went begging in this town at one dollar per dozen in summer, and two dollars in winter and none seemed to care to buy. The population was from one thousand to fifteen hundred, and the only avenue to wealth and prosperity was to wring it from the soil. Manufacturing had not come in. Millionaires, if there were any, were then far back in the Eastern States, or possibly in Chicago. There was too much water here to advance fortunes out of it, and those that had the greed did not think they felt the need. At that time the prairies were alive with chickens. If their nesting grounds had not been desolated by fire and they had been allowed to increase to their natural limit the corn fields of Illinois could not have fed them all. It was no uncommon thing to see whole corn fields overrun and ruined by them in the 60's. Ducks and geese and cranes stalked all along the low bottoms of Mud Creek and the marshes about Annawan and Rock River, but they were wilder and presented no comparison in their destructive character to the thousands of prairie chickens. The wild fowl remained a month and passed away. Prairie chickens sat down by a corn field and ruined it much as the barbarians crowded around a fortified city for plunder.



Prairie Chicken.

Many a time have we been offered free feed for ourself and horse if we would come and hunt them out. In 1855 and '56 we killed a great many and was glad to receive $1.50 per dozen for them and carry them twenty miles to market. In the summer of that year all the towns we visited had vast sections of undeveloped prairies around them. Here the birds grew and multiplied. Within two or three miles of as large a city as Peru the hunting was splendid. The turnpikes were just being laid out and travel was exceedingly difficult where they were not. During every little rain the roads were quagmired. Many wayside places seemed to be cut off from the towns. There was a dearth of activity and here the broods grew and spread. Population rapidly increased until the Civil War but the broods fell back and the numbers were not shortened or decimated as they have been since. We have already noted how in 1865 invention and the progress of wealth swung ahead, but until it laid its hands on the farms there was no perceptible diminution in the numbers of prairie chickens. In the '60's you could go out on a hillside and pick up the eggs as plentifully as you would gull's eggs in the Falerones. Then the farmers set themselves to burning over the old grass and increasing their farms and continued to do so till there was no grass to burn and no farms to buy. Do you think the hunters killed the birds? I tell you, nay. What was three or four thousand chickens to take out of two or three adjoining counties in this state during the whole of one year. There were at that time hillsides where one hundred to five hundred eggs was no great collection to pick up in less than half a mile. In LaSalle County I could kill a hundred chickens a day, but the more I killed the worse it was, for all the farmers in the neighborhood could not consume them and would not even though they cost them nothing. Now let us remember that the broods then were very large, seldom less than twelve to fifteen birds, and they were everywhere on the prairie stretching away miles upon miles and when I could give away no more, I saw in October more birds rise out of a forty acre field than all the cities in the Union could consume in a month. Don't you suppose that if all those birds had had a chance to breed the year following and their nests been protected from fire or the rapine of egg hunters and so continued, there would have been sufficient to supply every family today with a reasonable amount of game. Continue this increase for another year and all the hunters in Christendom would have been unable to shake them out. I never hunted that land again, neither anyone else for market purposes that I know of, and you might now search it over through corn field and prairie and back to the city, and you would not find a baker's dozen to pay you for your pains. If the prairie chickens could not survive hunting of that sort when it raises twelve or fifteen young at a time, how are the snipe and woodcock with broods of only four to escape, and these you must remember have their feeding grounds always restricted far beyond anything comparable to theirs.

From 1870 to 1880 the flocks did not show any apparent diminution. They were already so reduced in size and numbers, that their pursuit was unprofitable, and though many hundreds were killed in August very few, if any, after December, and the supply gradually increased all through the Fall by accessions from Iowa, which could constantly be seen crossing the Mississippi. But these are insuperable problems, and the farmer who certainly owns the land if he does not the birds, is not going to sow for another to reap. This state has ceased to be the hunters' paradise and it will remain so because the greater value for farming will swallow up the lesser for sport. When we come to examine the characteristics of the bird in detail we shall feel friendly toward him and regret his departure. He is emphatically the pride of the prairies. He is of noble presence. His size is so great and he stands so squarely on his feet you can but admire him. The feathers on his breast are beautifully barred. He is clothed to his toes. He is made to withstand all the vicissitudes of climate. The brown covering of feathers on his back and the motley markings make him undistinguishable whenever he sits down. Under his neck is a yellow stripe which aids his beauty. His wings are powerful propellers, he disdains short flights. He may wing away a mile or more at a stretch when pursued, or travel many miles for a new home. He will cross great rivers. He will enter foreign states when his food supply is shortened or fails. In April or the beginning of May the hen builds her nest. She lays twelve to fifteen eggs at a sitting and often raises two broods when one is destroyed.

The male is a grand picture when he begins his courtship. If you will observe him on his "booing" grounds in the spring he makes his nobility known in a superb way. The bright yellow that blazes over his eyes is his badge of royalty, it is the button of Prince Chuan, it is the love token which now inflames him and which he will lay aside later when he shall take his mate to his heart. With a little coterie of ten or twelve he is making a parade. Within a circle of ten or twelve feet every member is his own master. He is not a poacher. If his neighbor intrudes he pursues him, if he resists he indulges in a short passage at arms, jumping up and down, giving a vicious peck or two and then separating, he goes back to his circle and begins to inspect it with great particularity. He travels round the circumference, his neck expands, the feathers part and reveal a line of flame, the ear feathers spring out like spears. With his head close to the ground and his short tail thrown forward he is the picture of rage. And now commences a "boo" which seems to spring out of his mouth like that of a boy blowing bubbles. It is the soft, voluptuous strain of the male, with notes as full and swell as grand and elastic as Holiday chimes, pouring forth in one concerted peal the ecstacy and exhilaration of his soul. He seems to have no purpose in this display but to charm his mate. Unlike the partridge, the vibrations are softer and continuous, but they reach long distances. This is the only season of the year when he appears in full dress and cares to be seen. At a distance he appears to move tail foremost for his tail overshadows his head and breast. He is still wary. Advance and he moves away, return and he returns. Every day in March or April he will retake his ground and repeat his tactics.

When the eggs are laid then the familiar sound of the "booing" ceases. You may inquire for him but you will not find him. He is not making calls and he does not appear in public. He has taken into his company several others like himself and gone into bachelor quarters. In some remote field by some shadowy maze of bog or slough grass along which you may be hunting for snipe, you will find him. If water abounds or a little pond lies near along which a new growth of grass is forcing its way through the old sod yellow with summer growth, you will raise him every few rods. He is now very gentle. He will seldom rise over a few rods away, and the amateur sportsman is terrified at the thought of letting him escape. He wonders why birds have become so plenty, more so than ever before and he inwardly resolves he will return some summer day and make a wonderful bag.

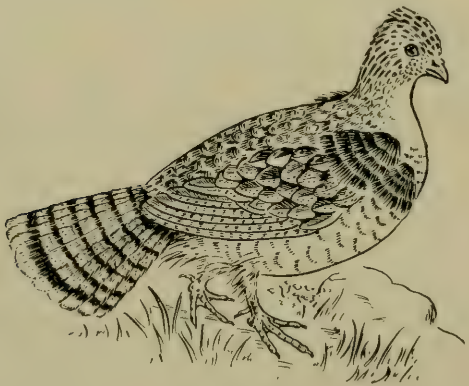
When in city or village he confidentially informs his friends that he has found a place where chickens are very thick and when the time comes he will show them what he can do. Alas, Summer comes. He clothes himself as lightly as possible, for is he not going to have a big day's sport? He hardly takes time for a lunch, but hurries on out to the country to the place of his choice. He beats right and left, he urges on his dog, he courses through tangles of summer growth of vines and weeds. He wipes the sweat from his brow, but the birds do not rise. There is a sense of weariness. The worry and disappointment accelerates it, and the long day sweeps on unmindful of the meager stores which supply his midday meal. He goes home wiser and lighter than he planned in the spring, and wonders what has become of all the birds he saw there before. The wise hunter must learn to change his tactics for any kind of game and pursue it in different localities whenever they change, and he who will not will be hopelessly left when he counts up his returns.

There is a question often raised as to whether the prairie chickens were native to this country, and if so, how did they support themselves before the country was settled and corn fields came in. We do not know, but we have it from good authority that our present birds were once natives of Pennsylvania and did not feed in corn fields. In those great barrens on the hillside, where the charcoal burners lived, the bird was native and got his living by budding. Any man who has hunted chickens in the winter with a sled, knows that prairie chicken is partial to feed of that kind here. Apple buds are his favorite but he will not go unfed where other buds are to be found, any more than will the partridge. It has been our experience on more than one occasion to find a flock of prairie chickens alighted on the ground in the thick wood and evidently displaying their former and normal traits by budding.

I stated in the beginning of this article that the large size of this bird made him a general favorite for family as well as for the cook. One bird will make a meal for a small family, two will suffice for a large one, and only the delicate connoisseur or gourmand will take exceptions to its quality as being much inferior to woodcock or quail. Prairie chickens full grown, weigh on an average about two pounds. If packed in small boxes they weigh two and a half pounds by the box. If in barrels of forty or fifty pair each they run about two and a quarter pounds. There is not much difference in weight whether they come from Nebraska, Minnesota, Illinois or Iowa. There is a pin tailed grouse which very much resembles prairie chicken, which is slightly smaller and sometimes has been known to mix in with our home birds. In this case the family resemblance of both parents is marked and there is no appreciable difference in weight. These come mostly from Nebraska. They flourish best in hilly country, and among the sand hills of Western Nebraska they are very common. They do not come down to the corn fields until late in the season, and the neighborhood of Johnstown, Nebr., seems to be the dividing line. West of it the pintails, and East of it the prairie chickens. In Minnesota and the Dakotas and in wooded countries the pintails are more plenty. In this state there have been none seen since 1870. Previous to that date they were occasionally killed. In Montana also the pintails prevail. In Kansas we have a smaller prairie chicken, being similar to our home birds, but not much over half the size. When the full sized bird can be found they are not much sought after and their value is proportionally less.

The prairie chicken covers a wide scope of country, beginning with Indiana it follows Westward to the Plains. It does not go South of Illinois and is scarcer as you proceed South. It prevails Northward in the Dakotas and Minnesota, till it comes in contact with the pintail which sometimes displaces it. It does not occur in Montana. In Iowa, Nebraska and Indian Territory is his settled home. The small grouse occur in Texas as well as Kansas.

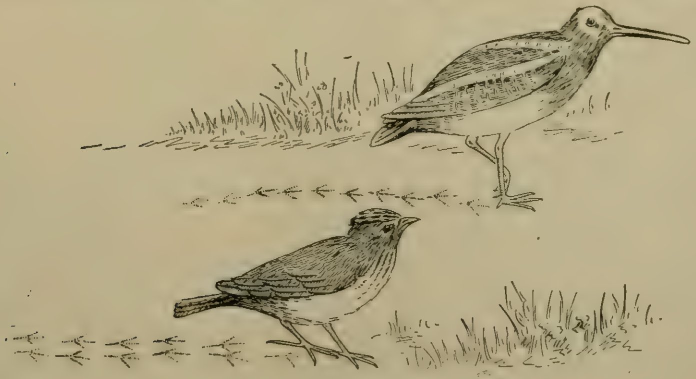
Whoever saw a live partridge for the first time and does not remember it? If you have been in the woods and one sprung suddenly from beneath your feet, the memory of it will be a silken thread which shall join you to the few and loving surprises which have come to you from the country, from the woods and waterfalls and painted in glowing colors the ambitions of travel. If you have followed him further over hill and dale, have heard the rush of his wings many times till it became like a twice told tale without emotion, have heard him tap his heart beats to his mate on a broken log, and have dwelt on the many artifices which he employs to lead you away from his home and his loved ones, and have not felt a thrill of delight, then Nature's beautiful purposes of adaptation you have lost. The partridge is essentially a bird of the woods as the prairie chicken is of the prairies. You can drive him from his home and he will take to the fields but he is not to the manor born. He is familiar with the thickets, he disports many hours among the tree tops, living or dead. Some cover he must have or he will not stay. He essays to find his way through briars and brambles. If he has found a wild grape vine with fruit he will come morning and night for his food though it has cost him a weary flight to do so. The bitter sweet vine with its red clusters is a favorite, and in the last recourse when all else fails him he will take to the buds. In the Northwest there is a tree which bears clusters of long pendants similar to the black alders of the East and with these he can fill himself in short order. In the older states East he was in the habit in my early days of coming to the apple orchards and feeding there. Just at nightfall the whirr of his wings could be heard as he left the bushes and swamps and started for the tree tops.



Partridge.

With what avidity he snapped off the buds when he came. Sometimes in heavy falls of snow he would sit content among the limbs of the orchard all day long where no enemy was known or noticed.

The color of the partridge is light brown on the back and neck interspersed with lighter spots varying greatly with the location, and it is believed with the age of the bird. The entire plumage may run thro' all the colors from a light brown or grey on the back to a deep yellow on the tail, and from brown and white spots on the breast to a color nearly white. The ends of the tail feathers are beautifully barred. The ruff of black feathers on the side of his neck gives it the name of the ruffled grouse. The front of his neck is light yellow. In Minnesota the birds are mostly of a brown hue. In Wisconsin many birds incline to the light or bright yellow on their wings and tail. In many remote places among the Green Mountains the light yellow prevailed. Where hunting was more common the darker hues appeared as they always did in New York State. The few birds killed in Illinois have run dark brown. The light yellow we think indicates increased age. Like all game birds the part-



Different Tracks Made by Game and Song Birds.

ridge walks with great precision, planting his feet squarely in a straight line. The impress of his feet in the snow is very marked and beautiful and is easily distinguished from the prairie chicken or quail. The sparrow, the robin, the lark make short jumps as they go. The songsters of the woods double round in every conceiveable attitude, but the partridge like all game birds walks with the pride of a veteran and is the representative of high art. His motions have that promptness and steadiness which give you respect, as becomes a regal lord among the denizens of the field and forest. In my early days many hours were spent in the woods where the partridges dwelt. Trapping was common and most of the birds that were not shot were taken with stone traps set up with a figure four. In heavy snow storms the birds would often disappear under the snow and remain there concealed for many hours together, only the entrance being visible and at such times the farmer boys would come, hunt up the holes and falling suddenly on the unsuspecting birds would make them their prey. Sometimes the whole flock would be taken, but more often many escaped. This kind of commerce represented quite a trade before cap lock guns appeared, and the market men coming along once or twice a week carried the produce to market of butter, eggs and game. Once I was told a great thaw came on and a number of birds began to soften and be in danger of spoiling. On the road to Peekskill, the market on the Hudson, the driver was passing a small pond which had been frozen and now thawed. Thinking the birds too far gone to sell, he took the string and threw it into the water and passed on. A week later the weather had become much colder. The pond was freezing up when he repeated his trip and seeing the birds there still undisturbed, he cut them out, cleaned up the feathers and sent them on their way again to New York, for which he received a good sum. I set many traps myself for these birds. One day I placed a line of traps along a path in the woods a few steps apart on a hill side which was a thicket, where partridges frequented and when I came out the next day to look after the traps, I had a whole armful of birds underneath them. When the birds ceased coming I set more traps outside of the wings of the others and much snow began to fall. I neglected them for a few days, but going later found one bird frozen fast under the trap, much eaten with mice, but I tore it out, sent it to market and it sold readily for a decreased price. I distinctly remember the first partridge I ever shot at the top of the rocks encircled with evergreens as I have related. I took it home and as we had a visitor that day, old Dr. Johnson, as he was called, we cooked it as a special honor to him.

Partridges are adepts at concealment. Their dark feathers in a large way insure their safety. Sometimes they will rise afar off when you are not in pursuit of them. Again they will sit still and let you pass within a dozen feet. If they have perched upon a limb of a tree where the woods are heavy and open, you can scarcely scare them away. One day I fired a small rifle in hunting squirrels and I discovered a partridge sitting on a limb only a few feet away. I was nervous and could not hold correct aim. I fired at least five or six times at him until he got ashamed of me and moved off. I have shot them on apple trees, where they had alighted to bud right over my head. When they fly to a grape vine, if the lower bird is first killed, and that manner followed the last one will remain to the end until all are killed. Many years before I came to Illinois I was told of one that appeared in the bushes close by the house one day, and allowed the little girl of the house to pick it up and bring it in as a pet or plaything and it showed no signs to fly away. I was passing a piece of woods in New York State, where I had sometimes seen a partridge rise from a little ridge, and looking down thoughtlessly as I came that way one day, I discovered him squatted close on the ground and I was not then over a dozen feet from him, and he remained without making an effort to rise till I killed him.

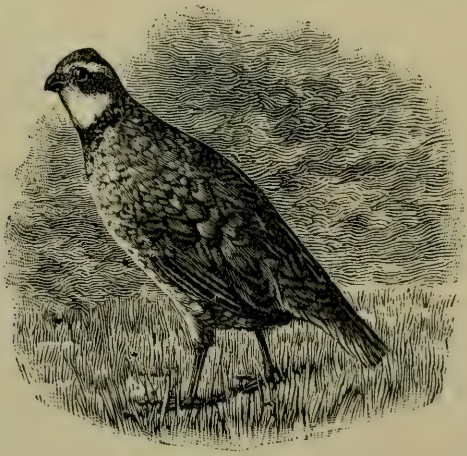
This bird is not small. If you should meet him in the woods, coming suddenly upon him in some retired place, bursting out from some cover he would startle you. You would affirm that he weighed at least five pounds. On the contrary he will scarcely weigh a pound and a half; he is about two-thirds the size of a prairie chicken. His flesh is the menu of a king, the color of it being pure white recommends it to the housewife. In times of open markets it commands more price than the prairie chicken, often bringing seventy-five cents to a dollar a piece or more. At present the stringent laws make it less valuable. As the birds can be had in the Eastern States while the prairie chicken cannot, the large size of the latter is an additional inducement to purchase it. They appear in all parts of the United States except on the prairies, the plains and wet lands, where there is no timber, and sometimes will take to the prairies also. We found them plentiful thirty years ago in Iowa, when we hunted prairie chickens. They were found many miles away from any woods. The dogs followed them through the coarse grass with great eagerness and they gave you a good shot which you would seldom miss. There are now very few such birds in Illinois, and the promising flocks of a dozen or twenty years ago seem to have been destroyed. In Minnesota and Montana they are most numerous, but we have never succeeded in killing more than twenty birds in one day, but believe many more have been taken in the states just mentioned, where so many thousand birds were exported until within the last few years. In the Eastern States partridges are very scattering, hardly half a dozen birds can be taken by one man in a day. They nest along the skirts of timber land, seldom going back far from the edge where they can retreat into heavy woods if necessary, and if a water course is obtainable they prefer that neighborhood. They lay a dozen eggs or more at a sitting and if not disturbed their flocks are uniformly large.

If you have ever heard a partridge drum you will not forget that pleasing peculiarity of his social life. By it he keeps in touch with his fellows or his mate. He selects some fallen log in the woods, which he can reach with ease from a thicket or brush pile, and from whence when the mood takes him he can send his dispatches to all the members of his family. The boom of the partridge resembles the "boo" of the prairie chicken, but is not produced by the throat, but by the beatings of the wings. The bird rises upon a log. For a moment he looks around to see no one approaches, and gives a rap on each side of the log with his wings. The motion resembles that of the baton when struck by the leader of an orchestra. The vibrations begin, they leap to the hills, they spread to the valleys. A momentary pause follows. One, two, three, the beats come forth in rapid succession. The bird rises upon his feet, he trembles with emotion, he floats in the air on his wings and toes. With one prolonged effort he beats such a tattoo all the woods are vocal. They dominate all sound, they rise into echoes, like the murmurs of the woods or an incoming train. Then the wings are folded the sounds die away like the pulses of the ocean.

With more or less pause he will continue this tumult for hours. It is not confined to any one hour, or month, or place. All the long summer and into the fall he continues this exercise at intervals. It is not easy to see him, for he is on guard against approach. At a slight sound he will stop his beating before you get near him, unless it is by strategy. He is an efficient dissembler. If she has a brood the female will use all the arts at her service to draw you away from the loved ones. Once in a field outside the woods I was surpised by a partridge running before me and flapping her wings as if in trouble or her wings were broken. I pursued, thinking to catch her, but I reckoned too quickly. When she reached a fence she raised over it so easily I was fain to leave her and lost my interest in her. On returning to the place from which she started I found one young bird not yet flown, somewhat larger than a quail, and I secured it. I carried it home, put it in a cage, but it beat its head against the bars and wires and died. However, it lost some of its wildness and fed out of my hand without fear or desire to fly away for many days.

In many ways Nature plans a recompense. When the soil is barren the sun is lavish. Among wild birds where great waste is liable to occur she provides extreme expedients of cunning by which the mother bird saves her brood. They are the pawns which Nature gives for the perpetuity of bird life. They are the physical and social equivalents by which she prevents or offsets impaired numbers. If wild birds had no more safeguards than domestic they would soon perish.

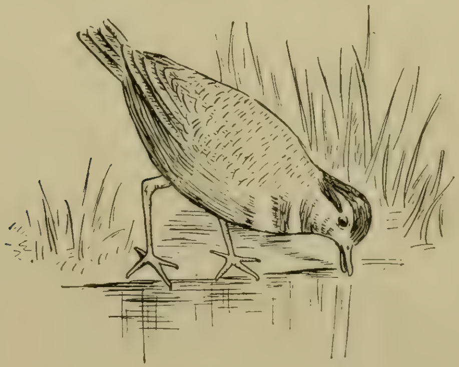
The quail is one of our most esteemed game birds. Not only is his flesh tender and delicate, but it rivals the partridge in excellence of flavor and juiciness. By most people it is more highly esteemed than snipe, woodcock or prairie chicken. In its native state it is half domestic, and instances are on record where it has sought the seclusion and protection of the farm yard and mixed in with the fowls. It frequently lays in the same nest with the fowls and brings forth its brood in the same way. It is often kept in confinement till its wild nature is eliminated and its desire to run away abated. With the farmer he is proverbially called "Bob White" from the similarity of its whistle to that sound, which commences in early summer when the bird begins to nest and is heard at frequent intervals morning and evening till the fall, when the brood is raised. In early summer the male is perched upon a fence post, or he walks with his lady love along the highways where feed is abundant and within easy reach. He is the pet of the farmers, who not only delight to see him with his covey of ten or fifteen birds, but generously credit him with devouring the bugs which are the ruin of their harvest. He is prized the more because when he has found a suitable home he seldom cares to go away. He requires food and shelter like the old-time harper. He will endure all the inclemencies of weather, will wander out before the storm begins and fill his crop and will sit by in cover till the storm ends. Only the snows fret and chasten his weary soul. Then he forms a trust and with the members of his flock builds a Chinese Wall which shuts the Tartar drifts from his roost, and, sitting together with their heads pointing outward, they wait for the sun to melt and soften the snow. If the snow is heavy and sleet falls and freezes a crust they are entrapped. Many days come and go; their food is spent, their plump bodies waste away in the stress of weather, and, cold setting in, whole broods freeze and perish. Such occurrences are rare but they occur at times in the whole of the Northern states and the remnants in the Spring are years in recovery. We do not remember of over three or four such catastrophes in forty years in Illinois and that in the Northern part. The Southern part with local broods escaping went to fill up the gap in the years following. The quail seldom weighs half a pound from the best sections in the North, and Southern birds, including Tennessee and Texas, often weigh much less. A barrel of forty dozen will seldom exceed two hundred pounds. The best birds come from Nebraska,



Quail.

while those from Kansas, Missouri, Iowa and Illinois are little inferior. The character of the food supply has more to do with their size than any other factor. Where they are best fed there is no complaint of light weight or shrunken bodies. The quail is conspicuous by the white stripe of feathers under his neck, which is confined to the male, and then it appears only after the second year. In one instance at least the white has been superseded by bright black, which specimen we now have, originally received from Indian territory. The color of the bird is mostly dark brown over the head and neck and getting lighter as it proceeds downward, with the ends of the shafts of the feathers a lighter hue and the extremity of the tail feathers a light blue. The breast feathers are flecked with bright oval spots. He has the appearance of being rather timid and of a playful nature, but his character highly disproves that idea. He is a good fighter and comes into battle with the vigorous manner of partridges or grouse, by jumping furiously at his mate and pecking away until he has lost or won. He is a polygamist and autocrat and disputes the authority and presence of other males that spring up and attract attention in his covey. Ordinarily he is gregarious. All through the fall after the brood is grown and able to fly, through the winter and until late in the spring, he refuses to be separated from his mates. You may hunt him all day and he will not abandon his natural dwelling place so far but that his shrill call will unite the covey again. If not followed up, after he has taken flight, in the course of an hour or two he will begin to travel back towards the point from which he came, and with an occasional whistle the flock will unite before night fall. Bob White will not be out late at nights. The partridge will go off by himself anywhere and at any time out of the brooding season. He will sit all night in an evergreen tree alone, or he will take his bed in the snows or on the ground in hearing distance of others, and no two of them sitting together. The quail will not roost in the trees. He will take to them frequently when he can find no other cover, sometimes after a heavy fall of snow or when a crust is formed and he becomes too conspicuous, but at night fall he recants his heresy and demands a compact union. His nest is a very simple affair of a few joints or tufts of grass woven together and lined with the soft feathers which he can find to spare. The nest contains fourteen or fifteen eggs of a buff and white color with small patches of brown. It is generally placed in an open field where the growth of grass protects it from intruders, whether human or vermin. When the brood is brought out it is the weakest of all birds. The little ones very much resemble bumble bees and they scatter out and disappear in the most absurd holes and corners, throwing themselves at times on their backs and covering themselves with a leaf like an umbrella and giving no clew to their whereabouts until you are gone, and the female calls them to herself again. When they get large enough to fly they are called "wooly heads," which all hunters disdain to take or pursue. A few birds become large enough to fly in September and more in October, when they are suitable to kill, but until snow flies and December has come you will not be sure but that you will find many immature birds that you will have to pass. The first light snows that come will bring your best sport. At that time the covies are full grown and birds of full size. Now they make a quick, sharp rise when flushed but will not fly far. You will not expect a bird that is only seven inches in length, of heavy build and short wings, to fly any long distance without rest. His feet carry him much further than his wings and he much prefers to use them, and he will only fly when it is unavoidable. There are times when he takes up a line of travel from one state to another, and rivers as large as the Mississippi will not stop him. Sometimes for days he will remain on one bank before he will venture to cross, and many are lost where the banks are very far apart. In 1866 and 1867 vast numbers of them left their native home in Wisconsin and crossed into Iowa and Illinois. In such cases it is not uncommon for a number of broods to associate together and in some instances over fifty birds have been found in one covy, and as these journeys occur only in the fall on the approach of cold weather, and largely from a colder to a warmer clime, it is believed to be an instinct of self-preservation comparable to the migrations of water fowls. Immediately after a very cold winter they will spread out over extensive tracts, mostly in pairs, where the covies have been desolated by frost, and cold, and many miles of country become joyful with them in the Spring where they have not been known in the winter. It is a well-known fact that in the old world quails pass from the Northern countries on the approach of winter, from France and Germany and even Britain into Spain and Egypt and Italy, and in such large numbers as to supply the markets of Europe. The increase of the bird is so rapid and his disposition to nest in any vacant place where the generosity of man will allow him to bring up his family in the manner he requires, it may be generations before he will disappear from the Western States. He has been hunted almost to death for fifty years, in Connecticut, New York and New Jersey, and still he remains, often in numbers not few. Where the partridge can live there is no doubt of the survival of the quail. He will venture into the farm yard in stress of the coldest weather and in the woods and swamps he will live on the balls of skunk cabbage, or in the neighborhood of a cider mill he will do well on the seeds thrown out with the pumice. He will often get poor in heavy snowstorms but return to normal condition when fine weather opens again. In fine, he is at home in more climates, he will stand more neglect, he will give more hostages to fortune, and remain intact and unsuppressed, than any bird we have in this country. He is cosmopolitan, his home is from Connecticut to the Gulf and from the Atlantic to the Plains. He will endure and perish and will endure again in the cold, constricted region of Minnesota or Wisconsin, never heeding or seeking his genial brethren of the South, who are accustomed to kindlier quarter and fare. Quail hunting has largely lost its prestige in Illinois; it can never be of any great interest to the sportsman where the state is made over mainly to cornfields and meadow land. Outside of the neighborhood of great cities there are few cornfields of any size which do not shelter one or more flocks of quail during the winter, but to step into a forty-acre cornfield and hunt it over for the purpose of getting a chance shot is the height of folly, which only a novice will undertake. After the first rise the birds become scattered and with a good tracking snow the crossing and recrossing of isolated birds soon destroys all chance of tracking them out. They will not lie still and the benefit of a good dog is not manifest where the pursuit is along open rows of corn stalks and the bird can track faster than you can follow him. When snow comes we would not use a dog at all. In the fall he is a necessity and if there is some open ground covered with tall grass and scattering thickets to which the bird can fly for shelter, you are tolerably sure of good sport. There is much of this kind of ground along the Rivers at the present day, along the sand dunes and patches of uncultivated grass. In country of this kind around New Boston, up and down the River where the fields are of reduced size, the birds are easily reached. There are many points along the Rock River where good bags can yet be made and where the birds seem to wander, during periods of cold weather. I have never seen, however, any country where the shooting was better than among the Swede settlements in Knox county. The timber belt is there well broken up into small holdings, the land is rough and broken and coal pits are frequent, and after the corn is picked there is hardly a track made in the fields until spring work again begins. Most of the cornfields will not exceed five acres each, and as soon as you raise a flock of quails they take to the thickets along the hillsides and dive down among the narrow canyons, where they lie close until you hunt them out. They rise one by one and the sport is fine. Two things they require; when they find food and shelter they will not move away. They seem to suffer nothing from the loss of part of their flock. They whistle for scattered or lost members but once, or till darkness sets in. If they do not return their call ceases. They have no remembrance of lost companions; they pursue their daily round for food and shelter as though they never existed. Often have I seen a quick winged hawk come suddenly upon them when the covey was flushed, and before it had rested in a fair and open field, take one or another in his claws and carry them off a few rods to an old tree top, without putting himself to any effort to overtake them. This has always happened in a timber country. I never saw a quail caught by a hawk on a prairie. To those who hunt for profit, above all things, hunt by yourself alone. To say nothing of the risk of injury by the careless handling of the gun of your companion, one gun will destroy nearly as many birds as two guns or more in the hands of companions. One gun is ample for the destruction of a flock, if you desire it. This applies as well when shooting over a dog as without one. When you have found a flock and raise it, it is altogether likely that when you shoot you will both aim at the same bird, at least with one barrel, with the result that it is generally torn to pieces. Waiting for your companion to fire often means you will not fire at all. Of the vast number of quail that have been killed there seems to be no means of getting any record, and the fact that the necessary supply for all the markets of the country have been received from less than one-third of the area of the tillable lands of the country, and that they have survived for a period of at least fifty years, makes it certain that their final extinction will be longer delayed than that of any other bird. The improved quality of repeating firearms will be its greatest enemy.

The Golden Plover is a bird of passage in Illinois. It comes from the South in the spring and from the North in the Fall. Its habits have changed somewhat from what we first knew him, in that now more often he has only one period of arrival in the Spring, about May 1st, whereas he used to come in small detached bands about April 15th and sometimes a month earlier, on the breaking up of the frost by a sudden warm spell. At such times his flesh was in very poor order, nevertheless quite salable from its scarcity at that time of the year. After a week's rest in April he moved on to some other country and when he appeared again in May he had put on a new and flashy coat. Streaks of black feathers had formed along the sides of his head and neck, and bright spots of black had replaced the dirty brown of his breast, which he wore when he went away. The longer he tarried in May the slicker and shinier his coat became, so that when he left for his summer journey, about May 15, his outward appearance presented a guarantee of the fat and juicy relish which his body gave. To our mind, in this condition he is the peer of any bird we have in the West, and has come to be as highly prized by market men as



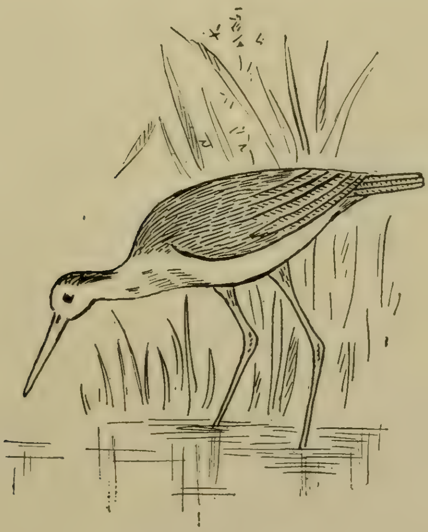
Golden Plover.

any other. In these late years as the flocks became smaller they became also wilder, and instead of staying in flocks when they alighted they spread out over the ground, every bird by himself, so that it has been impossible to shoot large numbers with a single shot. It also happened from the scarcity of flocks that a hunter could not station himself in any one place and be sure of killing very many at once.

In the 60's the case was altogether different. In the country North and East of Atkinson and around Hundred Acre Grove, and in the marshes nearest thereto, the birds came in large flocks, great numbers of them, and remained through the season till the time of their disappearance Northward. Within two miles of Atkinson we have seen as large numbers as in any part of Illinois. There was a brisk chance for the exercise of all the skill you possessed in taking them. Over high knobs the flocks would pass continuously for days in a northeast direction, and, sitting in your buggy with a gentle horse the numbers you could shoot were almost unlimited. In the morning the birds were wilder and more inclined to separate. As the heat came on they became less restless, their suspicions died away and by ten or eleven o'clock you could drive up within three or four rods of them, and by not driving directly towards them, but taking a quarterly direction, they would drop down on a hillside, close to the ground, and lie there till you had stopped and fired. If they showed a disposition of unusual wariness and we could not get more than one or two birds at a shot, we would not shoot but gradually round them up towards the pond or the edge of a marsh, and rather than be driven over that to less rich feeding grounds and take the labor of a flight, they would allow you to approach very close, sometimes would gather up into an immense flock, when you would get in your destructive work. For hours we have followed that plan in a single locality, where on the open prairie they would constantly rise and pass on before you out of reach. Sometimes they would light by a narrow pond of their own accord, large numbers of them, till the ground was perfectly black, when we would kill from twenty to forty birds at one discharge, but the success was most marked when they sought the shallow water an inch or two deep, spots of which were conspicuous all over the prairie. There the birds went for a bath. Then they became the victims of the crippled ones who at the first shot were not killed but unable to rise and used their vocal powers with effect to call back the flock which had started to move away, lifting their wings in the air and making their inimitable cry. The flock would return and settle down among them and the slaughter be repeated. As the heat increases and the low pools shorten up and the ground that once was damp and soft, so that the worms could easily be reached, has now become hard and sodden, the plovers show more decided symptoms to move away. They congregate in larger flocks. They sail round in the air and examine the most favorable places to alight. Small places where the grass has a firm growth they desert, the better places hold them a little while longer. They are plenty today. In the morning following there is a scarcity apparent and by midday whole detachments begin to gather in the air and sail about. At the sound of a gun they rise high in the air, and after making a few circles, sometimes for miles in diameter, whistling constantly, they whirl off into another state on their way to the North. From Illinois they pass into Iowa and Minnesota, only remaining a few days, then northeasterly again. They are not heard from unless they land as of yore in the vicinity of Cape Breton and New Foundland. As they are always wanted badly for market purposes and could easily be had in Boston or New York if they were to be reached at such a short distance, we hardly think that very many of them remain there at this day. One thing is noticeable, the bird before he leaves this State has only very small eggs when it is killed, so that we have reason to believe they have a month or more in time to reach the country where they propose to nest. There are such vast and unexplored wilds in British America and around Hudson Bay, even up to the Arctic Ocean, where ducks and geese and cranes abound and nest every year, we believe their present breeding place is in that country many hundred miles beyond Illinois, but their flight is so rapid and their incubation so short that some stray specimens reach us on their return September 1st, before they have wholly regained their winter plumage. What few remain here get very fat before they move away and in that time their plumage changes.

There are few golden plover west of the Missouri and we are inclined to think that during their times of passage they follow up and down mostly through the gateway of the Mississippi.

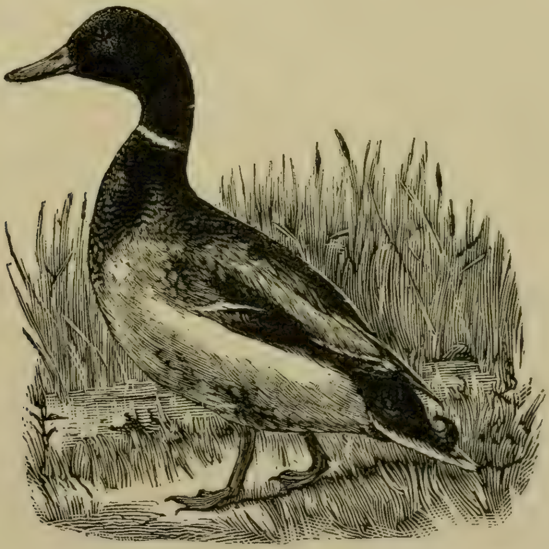
We have said the grass plover is an inhabitant of this state, and it remains with us all summer. Here he raises his brood and leaves early for the South during the month of August. Some stragglers appear in October. He is also extremely plenty in Kansas, Nebraska and Minnesota, and considering how much he has suffered at the hands of many hunters, the wonder is that he has survived at all. Unless it is the quail no game bird has figured up the losses to as high a total as has the grass plover in Nebraska and Kansas. In those states it seemed to be the ambition of an inconsiderate dealer to see how many birds he could destroy and sell at a minimum figure, so small, indeed, that the price but slightly paid more than the cost to kill. In some future period some seeker after statistics will be surprised to learn that not less than fifty or sixty thousand birds went annually out of Nebraska in April to Kansas City, and afterwards were sold broadcast all over the Union wherever a buyer could be found for a munificent sum not to exceed fifty cents per dozen and sixty to seventy-five cents in New York, and this same drain was continued for many years until after 1890. This


Grass Plover.

had a bad effect in an indirect way. Ordinarily grass plover get their young raised in June and July, and the prairies of Nebraska and Kansas are teeming with them in August. When we first went there in 1880, in August, a good shot could kill a hundred birds a day in the cornfields, (most of them magnificent birds and extremely fat), and continue so doing till near the first of September, when they moved on to the south. We never could find them very plenty in August but one year. As soon as we began to hunt Dow birds in the Spring in times of scarcity, the hunters spent much of their time in killing grass plover and then the young birds began to disappear from the prairies. Instead of getting a great many handsome birds in late summer that would weigh four or five pounds to a dozen, we were compelled to be content to gather in only a few barrels in a whole month, and many of them too light to be wanted. If some restraint could have been put upon this slaughter in the Spring enough birds could have been saved to supply all the markets the year round with fine, fat birds. Even the poor spring birds would have brought a moderate price if they had been scarce. The year before 1880 we sold them as high as $4 a dozen, which was a good price for a bird which had little to recommend it but its scarcity. We paid that year the same price for Dow birds and grass plover. The next year we paid $1.25 to $1.50 for grass plover and $2.00 to $2.50 for Dow birds. As the years followed one another the price constantly was raised on Dow birds and lowered on plover until at last Dow birds were worth $4 a dozen and grass plover worth 60 cents. One year during a scarcity of snipe we sold our entire stock of grass plover, spring birds, at an average of about

$2.00 a dozen. This slaughter that was going on in Nebraska and Kansas was followed up largely in Northern Iowa and Minnesota. In these places new freezers were being put up in many places. All that seemed necessary to the buyer to make fortunes was to freeze up the birds and wait quietly for the profit. Thousands and thousands of dozens were absolutely thrown away. We know of one man in Kansas, not a dealer, who after shipping east four or five thousand dozen, offered to sell us as many thousand dozen as we wanted for fifty cents per dozen on track. It took ten years to decimate the grass plover in the Western States. To us it passed all understanding that a bird that usually raised only three or four young in a season and was seen only in scattering pairs, not very many appearing at any one time, could escape extermination so long. No doubt many sections of country were not molested, and the drafts that were made upon the birds reached wide areas, and those who had entertained bright hopes of great margins began to waver when unprofitable returns began to come in.

The spring bird is a light affair. He comes to his summer home without fear, and while the female is busy with her nest the male comes sailing along in his triumphant way, throws up his wings and settles down on a post where you are sure to see him, often by the roadside, where he can regale you with his song and invite you to disturb him if you dare. If you are riding across the prairie and he sees you he will follow you many times for miles, singing his friendly song far above your head till you are far away, then he returns to the neighborhood of his nest. In driving along you may, if you choose, snap off his neck with your whip when once he has alighted. This state of endearment does not last very long. As a rule, you may say, as he begins to grow fat he begins to grow wary. When the young leave their nest the grasshoppers are in season. He leads his little flock of young birds to some old grass pasture which is a partial cover and alive with his kind of feed, where they all begin to feast and fatten. He takes on a bright inquiring look, and if the cover of old grass is not sufficient he is careful to fly to thicker cover, or even to run there before he will give you a good shot. If he thinks he is hidden so you do not observe him, he may sit quietly, but all the probabilities are he has sized you up with a good deal of judgment. As his fatness increases the feathers on his breast are changed from a light to a bright yellow, and you can tell his condition by the strength and brightness of his color. When he first came he did not display that rich hazel which is a marked feature of his autumn days, and he seemed more inclined to run than to fly. Then he was much of a coquette, alighting wherever he thought you would notice him, now flying delightfully near you, he would warble his address. "Don't you know me? I was with you last year. Glad to see you every day." And every day he will come and repeat the same message till midsummer. Slowly his fashion changes as Autumn comes on and his brood is saved. He leaves the mowed field and the mower. As a rule the thinner the bird the less he is troubled with your presence. As he gets in better flesh his timidity and suspicion rapidly increase. He has a way now of throwing up his wings, but it is to fly. When he mounts it is high up in the air and his notes at parting are monosyllables, which seem to glide like jets of oil from his fat and unctuous throat. He is individual now, not social. He is partial awhile of the dignity and delight of a few friends, but they are soon forgotten, and he will pass out one by one into the gloom and darkness which intervenes between his home and the land which he now covets. The coming rain storm will end his summer life. His secret is with the stars until he is a hundred miles away.



Mallard Duck.

When we come from land birds to water birds among game, as are the various species of ducks, we would naturally expect their numbers would be very much increased. Water covers a large part of the globe, but most of it is unfit for the home or the haunts of wild fowl. The ice pack that covers the north part of the Continent for eight months of the year drives them to warmer climes when winter is on. The great oceans produce no bush, no vegetation, no plot of land upon which the weary traveler from Arctic Seas can rest. From year to year the waves swallow up all that the Sea produces. Only the floating ships that pass on into the night and leave no trace behind them escape. The shores of the Ocean are silent. Only here and there a little belt of water surrounded by rising peaks of land that cover in an estuary or bay and draining off into shallow basins where bottom is easily reached for food, have the ducks any sanctuary whatever. As the cities enlarge and spread and white sails dot these suburban resorts, the ducks must go to sea or fall back into the rivers and lakes of fresh water. There their prospects are not much better. American genius and enterprise are scouring the back bays for new railroads and new lines of travel. Cities are planned, new ships come to port, and the rivers are unlocked and their treasures transported away. Many years ago the ducks nested in large numbers in every marsh where wild flags, or water and coarse grass appeared. The Annawan swamps, in common with many others in the country, raised mallards and teal in profusion. Then came a dry spell of several years' duration. The importunities of farmers, who saw a chance of enlarging their realties, drove an effective bargain with holders of these waste and flooded lands, and with a system of ditches, reclaimed so much of it that the ducks eventually avoided it, and their associations were so thoroughly dissipated they never cared to come back. For a while they bred and thrived in the waters of Wisconsin and Minnesota. Inside of the timber belt of Northern Minnesota lies an immense prairie country, full of all the rice ponds and laughing lakes which encourage the ducks to tarry. There they first appear in the Fall within reach of the hunters as the weather turns cold. Here the ducks filled in as they left Illinois in the Spring. The waters were troubled. The Indian dwelt along the shores; his trusty canoe was always at hand; the markets were open for ducks; he wanted them, and when he commenced to hunt he hunted all Summer. The home markets furnished him advantages for sale. Across the open pools he pursued the birds with vigor. The ring of the carbine in those wilds was heretofore almost unknown. His bark cut the waves that were guiltless of ripples save for the newcomers and his oldtime fur bearers. The ducks could not rest, they moved again. This time they passed northward, so far the blast of the steam whistles could not reach them. Neither could the Indian move that far. He is a mover from time immemorial, but the white man holds all the routes of travel and will continue to do so. The Indian must go back to the fur bearers that thread their way through all the fresh water lakes, or perish. The Indian will live and die on the outskirts of civilization and still be uncivilized. How far northward the ducks have emigrated is unknown, but it is believed many of them are very near or quite within the Arctic circle.

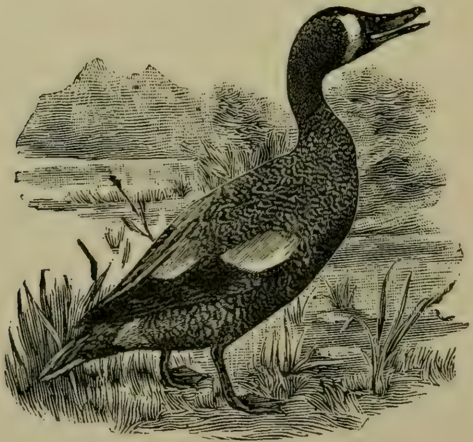
Somewhere about 1885 we had our last flood of ducks. They were in surfeit, mostly mallards. The waters of the Mississippi were congested with them. The same occurred along the Chariton in Missouri, and doubtless many other points. The birds were not hard to reach. It was winter time and the slaughter kept up until it was nearly Spring. As one flock was destroyed new ones came in. Whole carloads were killed and sent to market and sold at ridiculously low prices. Where freezers were to be had hundreds of barrels were carried over into the next year. If you can believe that short time destroyed them altogether as it did the pigeons a little later, then you have no need of hunting or of laws.

The mallard is a native of no state or territory exclusively. He is not unknown in the waters of Long Island Sound. We have shot him in the Croton River that supplies the aqueduct of New York. He is an inhabitant of the entire West and South, beside his active visits in the extreme North. His lines of travel in the Spring and Fall carry him along the important rivers. He turns off wherever he can see an open pond to feed and rest. He is always on the lookout. No other duck sends out so many scouts to spy out the land. The most remote lakes are not infrequently visited by him wherever they have been detected by the sharp glance of his eye. He knows every defense that hunters make to lure him within reach. He knows the safety of other ducks which he sees in the waters will grant him the like safety. Where redheads and canvasbacks alight he is all patience and fearless. He is more neglectful of the teal and small ducks which use shallow water and near cover, and he has been surprised so many times that at every motion he is fearful an undiscovered enemy will spring up. He is partial to the flags where they fringe deep water and he can sit about unnoticed. He is a bird of many associates and is not coy or critical about his companions. He will sport in the air with a flock of teal or even small ducks, and on the arrival of a new flock of any kind he is liable to light down among them. His appearance is like a flag set upon all waters. Like the crow while watching for himself he watches for others. His size varies greatly and much with the season. In the Spring he arrives poor in flesh. When the cornfields are bare he soon makes up for all short weights. Forty years ago he used to be frequently found in the cornfields in March and even in February. Now he seldom appears before April 1st, only in very scattered flights. By the middle of April, when he is ready to nest or leave, he will weigh from three pounds upwards, earlier not to exceed two to two and a half pounds. In the fall he is not desirable until after October 15th, when his winter coat is far enough advanced to give him the best sale. In general when his coat is fine his flesh is also. The female does not present the beautiful color of the male, neither is her weight so great. Sometimes they have been fed and netted in the Fall in large numbers, and in that case they would weigh four pounds each. Where hunting is good many persons seem to desire mallard shooting above all others. There are men who can lie down in the bottom of a skiff and dropping on their back when seeing a flock of mallards approaching, can so place or displace themselves and without frightening the birds away secure a good shot with each barrel. We did not spend much of our time with them. What little we did was generally unprofitable. Size considered, they are the cheapest ducks in the market. They are heavy to carry where you have not the convenience of a boat and the best shooting is often where a boat cannot travel. Besides mallards and teal, especially the greenwings, are most liable to spoil of all wild ducks in a sudden change of warm weather. To draw them reduces their best appearance and value. Ordinarily we could kill as many chickens in a day as mallards and many of the drawbacks we have noticed did not happen to them, and they would sell for double the price. I am not certain after handling many thousands of mallards I derived any profit from them. In instances they have sold remarkably well, perhaps for a first time and under new circumstances. I never sold any higher than $1.25 a pair, and then only in the winter season after the close of the war. A dollar per pair has been the objective point, and that has been very few times reached.

There are wonderful stories afloat of immense numbers of mallards killed by some fortunate hunter, but I am not one so fortunate. I never killed but fifty birds in one day, and that only once in the course of three or four hours' shooting. This was in a cornfield adjoining Coal Creek a mile and a half north of Annawan, and the circumstances were all favorable. Large numbers of mallards sat in the Creek all day and late in the afternoon came out over the field, attracted by a thin strip of buckwheat which twisted around at varying angles and cut in twain twenty or thirty acres of corn. I had only to step inside the shadow of the corn and the work commenced. A new breech-loader had just come out and I had one of them. It was a pinfire and already the defect of that kind of gun was apparent. The smoke constantly worked out around the pin. The strain of the gun by degrees parted perceptibly the close union of stock and barrel and it appeared no great prophecy of the future when the locking would give way. I threw down a handful of shells on a corn hill and began to blaze away. The shots seemed to have unusual effect, perhaps the birds were closer than I imagined, but I seldom fired in vain. Small detachments of birds came up steadily from the Creek, and viewing the ground, prepared to light down. They returned with one or two less each time. My dog sat by me and picked up all the wounded birds. He knew when the shot was effective and if the bird fell twenty yards away or forty yards, he bounded away and brought it in, never missing a bird. I never shot so fast before. The loads were strong and the gun was light. I constantly felt at every recoil that the fastening was gone or given way, and even doubted whether my head remained. I examined the smoked barrels, saw that they held nearly in place, and drove in two more cartridges. At last I broke a wing but slightly from the point. The bird settled over the top of a hill and the dog tarried too long. I ran after him. On the way I ran onto another hunter who was all anxiety to know how many men were shooting over there. I told him there was no one else but myself, and explained to him the action of the breech-loader. He declared he thought all h—l was broken loose. In the course of a few hours I secured the number above stated and never lost one bird.

Where the hunter has succeeded in finding an open hole in the ice in the marshes north of Annawan, and the flags gave him cover to approach within shooting distance, fifty birds have been killed at one discharge, and probably a few more. When the ice is forming and birds come in thick around a pond hole it keeps it from freezing and then the death record may be very great and the birds are the best of the season.

There are few people who have taken an interest in game birds but have a distinct idea of the nature and appearance of teal duck, both green and blue wing. In the early history of the game business in Illinois both kinds were quite plenty. Wherever shallow water prevailed and the season of the year was opportune, in the swamp country north of Annawan and Mineral, and in and adjacent to St. Peters, flocks of a thousand or more were of no unusual occurrence in September and early October. The best hunters killed as high as 100 birds each in one day and in one season when a swivel gun was brought into use it was reported that fifty or more blue wings were often killed at one shot. Good teal shooting was then the rule in October until away along in the '80's. The difference between the two kind of teal was very early apparent. The blue wings were always in superior condition throughout the fall. The green wings were of a soft and spongy nature. They rarely remained entirely sound when held a few days for shipment. The only time they were really prime was at the close of the season, either Spring or Fall. Their plumage then was of the best. They associated in small bands which followed up the little outlying streams that go to make up the more important rivers. Here they remained till the heat of sum-



Teal Duck.

mer or the cold of winter drove them out. They remained long after the blue wings were gone, which had become more sagacious and moved South. At this time the markings of his neck and his whole coat was noticeably beautiful. The stripes of tawny red had become brilliant and set off the plainer colors which covered his back. His wing and tail covers were marked with an excess of varying tints, all of which exhibited themselves when on the wing. Either kind was easily killed, as they lived and fed remote from deep waters. Generally the two kinds fed separately, but the blue wings did not covet wooded countries while the green wing frequented both timber and prairie. The green wings weigh much less than a pound, the blue wings very often a pound or more. The blue wings arrived early in pairs in the Spring; they went South in flocks. In the beginning of May and through the month of June in those days strips of old grass, adjacent to shallow ponds, oftenest in the neighborhood of marshes, were coursed over by the female who repaired there to build her nest. In some little tussock, hid away from the view of passersby, she formed a bed of soft grass overlaid with feathers from her own body, wherein she laid twelve or fifteen eggs, which she watched with tenderest care till the brood appeared. In July and August she led them to adjacent waters long before they could fly. Every brood formed a covey and of every covey she was the sole guardian. They fed along the shore and were quick and alert to hide away when anybody appeared.

Whoever has seen these new-born flocks, skimming the waters of a pond without a ripple on the surface, or slipping slyly through flags and brakes and spear grass without a stem displaced or a panel broken, must have felt the illusions of art slip away before the grander displays of nature. Summer renews the rich garb to the hills and fields which Winter winds have shaken. Over the barren earth falls rain and sunshine. A plant springs up here and there, a leaf or flower hides the uncanny mould, a tiny nest is formed and soon the waters are gay with microscopic fleets. From out the fetid waste towers and cathedrals and steeples of woven grass spring up and the corridors sparkle with insect life. In the twilight, in the black and dark night the water spider spins her Gobelins. Across turbid pools and angry chasms she throws bridges of gossamer and traverses them with electric speed to bind the moth and the fly in her chambers, and robed in a vest of gold and scarlet, she sits down a queen. From beneath the surface of the water spring up airy bubbles which bear golden crowns or flash in helmets of a mock army fading away in the all-absorbing waters. The rough world is symbolized in the glory of her children.

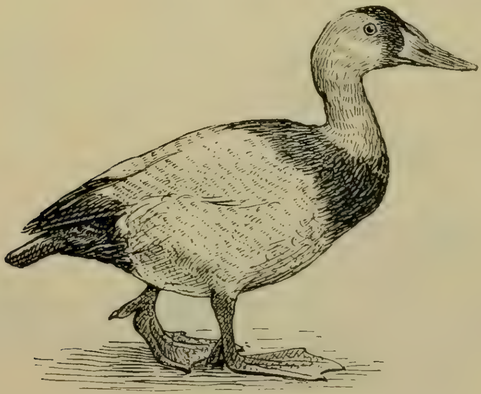
We think the large flocks of ducks that in those early days appeared were made up mostly of home-grown birds. The Annawan country at that time seemed to be underlaid with the waters of an immense lake. Buckles of Geneseo used to say he could sink the town with an augur hole. It did not seem possible the land could ever be drained. Nevertheless the many dry seasons that have preceded the present one have wrought wonders and now water is none too plenty and ducks have ceased to nest there. We recall the distich of Sir Walter Scott:

> "To see the stately drake
> Lead forth his fleet upon the Lake."

and wonder that he was a benedict and carried a gun. "Anything alarming?" "Oh, no," but Lockhart, his son-in-law, described the poet as possessed of very varied general information, the owner of a dog, and if of the hunting kind must have taken him to the Tweed many times and seen ducks in profusion where he might have brushed up his information with the familiar adage, "All ducks are not drakes." Furthermore, between the two ditches of Abbottsford and Ballantine & Company, which were slowly draining him into bankruptcy, he might have overlooked obvious distinctions of habits male and female, and accorded the male duck the undeserved honor of being the lord protector of the flock, when on the contrary all hunters know the female bears all the drudgery of protecting and caring for their young, a conspicuous fact noticeable of all ducks. The drake is the most perfidious benedict. He lives in open disregard of the rights and privileges of his mate, making morganatic marriages in all kinds of times and places. He is especially fond of displaying the superficial gaudiness of his coat to every female that passes and never wearies of their attention. Like many a lord he is not on hand when crises come. Often in some secluded pond he spends long seasons of rest in the company of strange wives while the heat and halo of summer lasts. He limits his matrimonial duties to himself, which are often elusive and performed only when it suits him. When the female in all this time has reared and cared for the brood the repentent lord comes back. He has now sobered down into quiet ways with the shedding of his summer coat. He is again gregarious and will not seclude himself any longer among strangers. He will keep in close distance with the members of his flock, but he will also join an emigrant flock as readily as his own. He will bring roving flocks together, and the larger the aggregate the better does he seem pleased. He becomes more wary as the fall approaches and the flock increases. He will rise en masse with the least alarm and is subject to all the limitations which beset his bird life. He is fattening rapidly and by the middle of October presents an interesting mark for the gunner. He falls with a splash and a thud, many times in numbers at one discharge. The few bright days of early October seem to be well pleasing to him and he remains much in the same neighborhood if water is abundant and he is not too hotly pursued, but the time of his sojourn is short and in common with most birds he disappears in a night. He passes far to the South and in the Winter time he is as far down as the swampy country of Louisiana.

The blue wing is a superb treat for the table and to our mind has never been sufficiently prized. His flesh is firm and will remain entirely sound when the green wing is rapidly becoming out of order. Like the canvas and redhead he is fat only in the fall and his entire change of color from Spring to Fall makes it impossible to substitute Spring for Fall birds. A few hundred teal have been gathered in the St. Peters marsh the past Fall, but a change backward to dry seasons again will be fatal to further sport among us.

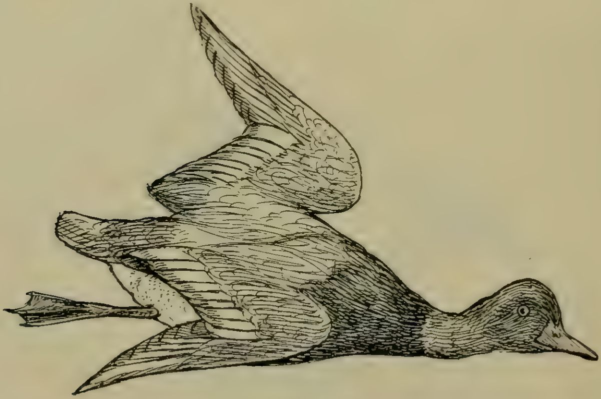
Canvasback and redhead have always occupied a very conspicuous place among marketmen wherever they were to be had and the laws permitted their sale. In 1885 and '86 they reached the highest figures known, at least for canvasback, and five to six dollars a pair was no unusual price for fat, heavy Fall birds in a wholesale way. Redheads at that time sold as high as three dollars per pair for spring birds, but two dollars was the more common price and in some seasons they declined to less than one dollar. Under the stimulus of the larger figures the country was scoured from Wisconsin to Texas and all along the Atlantic coast the birds were roughly handled, and even California was drawn on for Winter ducks, especially canvasback. In a year or two the pendulum swung backward. Fashion, which in a large measure sets the prices for all game birds, changed suddenly so that they were not so frequently called for. Many of the birds were found to be of poor quality and lightweights were common among Spring ducks, which, coming out of the coolers hard frozen, they deceived the best buyers, until Spring birds were almost unnoticed and fell from to one-half to one-third of their former values. Then it followed that standard weights of three pounds for canvasback and two pounds and a half for redheads for the Fall catch were insisted upon. If this recession in prices had not occurred when it did canvasback and redhead



Canvas Back.

would soon have been a thing of the past. All kinds of ways for securing these birds were practiced and allowed. Sink boats, sneak boats and swivel guns were brought into play and destroyed large numbers, whereas if they had been protected and allowed only to be killed as now in the fringes of deep water where flags make a cover, they doubtless might have remained fairly plenty for many years to come.

Not very many are now killed in the spring time in Illinois. Those that are brought into the market come mostly in the fall from Wisconsin and Minnesota, and the hunters there have been very reticent of disclosing their knowledge of the exact places where they were killed, but now that the laws have forbidden shipping out of the State the knowledge is not so important, and the man that goes for sport can certainly now secure them fairly easy and in reasonable numbers. Redhead seem to be plenty yet in some places, but not enough come in of standard weights to materially influence the market. They hold their place well up to old figures and it



Red-Head.

is no secret that except where wild celery grows, which gives the canvas a very excellent flavor, the quality of fat redheads fully equals that of canvasback, and except among the smaller sizes are worth equally as much. Doubtless the appearance of the canvasback has tended to give it a fanciful name. In this respect it is widely different from all others. Its neck and bill are very long, fitting it to feed in deep water, and while the bill of the redhead is rather broad and short, that of the canvas is thin and long. The male redhead and canvasback are very beautiful from their pronounced red color. In the Spring the breast of the canvasback is a clear white, so that the different markings make him an object distinguishable everywhere at long distances. In the fall he takes on a grayer color, the white disappears and the colors are not so bright. In 1884 we had a large stock of redheads, which sold very slowly in the following Winter and Spring at about eighty cents per pair, which was in no way encouraging, and contrary to the advice of the best dealers we put up a large quantity in the Spring following, which we bought at low prices. The results were extremely flattering and they have been related in a previous chapter. Neither redheads nor canvasbacks are native of this State. Occasionally a redhead has nested in this country, but we have never known a canvasback to nest here. It is not known with any certainty just where they pass the Summer, but it is far to the Northwest, where they must nest, and they first appear in Wisconsin during the flights of other ducks from the North, where henceforth the only trade in them will be.

The game laws are popularly supposed to be passed for the protection of game. When they accomplish that purpose they are to be commended, but in most cases they lose that distinctive quality and are made for the protection of sportsmen. Such men are always opposed to pot hunters. Yet it is true that all sportsmen are pot hunters, either for themselves or somebody else, only the real pot hunters work for their own profit, to get game, while the true sportsmen who are real shot slingers work for the prize of winning and the delight of sport. If the birds to be protected are so scarce that only a few can share the prize then the generosity of those who are able and willing to give the game away is invested with a new luster. Now is their day of grace. The noble sportsmen who fight shy of selling their goods are invited by the laws to step in and take the game while it is to be had. Profit taking in game in Illinois is a thing of the past. There are no levies of wild birds being made. There are no accumulations in cold storage, which disturbed the game fanciers so much a few years ago. The laws are made for your benefit. If you doubt this a study of their real character will disabuse you. You need not be told that to kill prairie chickens in September is not to protect them, when as a consequence every brood is cut to pieces in a few days after the commencement of the month. Jacksnipe are free to be killed all Winter when they are far off in the Southern States trying to eke out a precarious existence until Spring. In April the same law holds good till fat and flesh is put on, then shooting ends. Not till the last week or ten days of April is the bird at its best flesh, and of what value is it to kill thin and sickly birds up to that time? What do you think of wookcock sold in the open markets under guarantee of law in December and January? You may well wonder at the gullibility of law makers which allows sportsmen, noble though they be, to go South for Winter sport and kill the very birds that we shall need next Summer to raise new broods. Not a woodcock breeds in Louisiana, Summer or Winter. Nevertheless you can go there and your table d'hote be supplied with them every day, and they can be distributed in Northern markets at present when they are few as in the past when they were plenty, till they are none left to distribute. The game laws of Illinois permit the bringing in of birds from other States from October till February following. The Southern States will make the same plea for winter shooting that our hunters do for Spring shooting in Illinois. Woodcock are to be had in the Southern States only in the Winter, and it is now only a question between sportsmen who shall get them, North or South, but in the end it will be as the frog said to those who were stoning him, "This may be sport to you but it is death to us." With our shooting of Spring ducks, if it is claimed this is the only chance for them to be killed, we would say why need they be killed at all. They are, in most cases, so poor in flesh their market value is very small. The woodcocks are put to the slaughter twice every year, from September to December in the North, then till February in the South. At the present time in December and January the hotels in the Gulf States are seeking to attract guests by the superior facilities of shooting woodcock, quail and snipe which they have there, and which in the case of woodcock and snipe are the remnants of broods which have been raised and protected in the North. It is not believed the Legislature had in mind birds of passage as these two kinds are, when it admitted their sale from other States, and they intended the laws should apply to prairie chickens and quails from beyond the Mississippi. As these States now forbid transportation out of their limits, it would be no hardship to repeal all the laws which make provision for interstate traffic. Woodcock and snipe could then be used only for home market and further diminution of birds could be placed where the real fault belonged.

There have been laws for game protection ever since the State was settled, but they were not early of any practical value. So long as game was in plentiful supply the laws were not invoked and in no case were penalties exacted of any moment till the laws were consolidated in '89 and the appointment of game wardens in 1885. Subsequently thereto for many years a semblance of enforcement was kept up in Chicago whose dealers took upon themselves the burden of seeing that the laws made were practically in their favor, and when the wardens could get no remuneration in enforcing the laws, in time they became impatient and demanded some suitable recompense for lying still. Then the dealers bought their favors though they did not denominate them bribes. No one but the dealers in Chicago took the trouble and expense to go to Springfield and the law makers there passed whatever was asked by three or four dealers carte blanche. As long as they could make the laws so that they worked entirely for their benefit they could afford to pay the wardens to stand still, but in time they demanded larger bribes. To save themselves the dealers concocted the plan of consolidating the trade within their hands and shutting out others, and by so doing, paying expenses out of the profits.

This did not occur until 1896. Those who did not pay the wardens were prosecuted. Three or four men combined the trade in their own hands, and the amount of game seized from all shippers was very great. At that time it was not known that it was illegal to ship birds out of Illinois from October to February. If the law had been actually read and so considered, it was difficult to understand how that birds killed in Nebraska, transported to Illinois and then reshipped to New York, could break the law any more completely than it would have done to ship direct from Nebraska to New York. All the West was at that time draining its supplies largely into the lap of Eastern dealers and the scope of the trade seemed to widen and broaden perceptibly. Before 1889 it was legal to ship to the East prairie chickens and quails till March, then it was narrowed down to February and all the dealers, both shippers and receivers, considered no impediments in the way during that period. But when freezers began to play a prominent part in the preservation of birds, the older and abler dealers began to put away receipts in times of surplus and to bring them out later at a profit. Large stocks were carried over from month to month, and later than March or April, and were profitably sold in Boston and New York, often as late as May 1st.

In the early '70's a Mr. Racey of New York City had constructed in Center Market a new plan to freeze birds and hold them, and he bought birds in December and January when low, and retailed them all out in the Spring as suited his fancy and profit, and he supposed that they were legal to hold both in time and place because they were his property and bought when the law permitted it, but the Game Club of the city contested his claim and won their case on the plea that the law forbid having in possession after February 1st, and that the law must be construed strictly, and as a consequence himself and business was practically destroyed. Then the dealers commenced to sell the birds on the quiet without disposing of their stocks faster than was profitable, and no trouble came of it until about 1890. At that time Powell Brothers discharged an employee, who immediately made complaint that a large quantity of game was held in storage by them. This was seized and confiscated, and about $2,500.00 was paid for illegal holding and selling. These prosecutions began to disturb game dealers more or less in the West, but as long as Chicago was open to a few dealers and Express Companies did not refuse to take game through to the East at any time when it was asked, it was felt that it would be policy to have the business adjusted and settled first in Chicago, and outside dealers worked in the lee of transactions that were known to be going on there. There were laws in Nebraska and Kansas which forbid transportation out of the State, but they were more or less neglected and shipments came from there as freely as usual. While this subject was under consideration, early in the summer of 1895, the storm which had been kept down in Chicago by liberal bribes or bounties, broke out in Kewanee. The game warden with deputies and constables appeared and claimed I had sold and shipped a box of game to a small station on the C. B. & Q., contrary to the statutes of the State, and consequently had made all the game I then possessed liable to seizure. The law of 1889 prescribed that it should be unlawful to hold game after February 1st for purposes of sale. As I had sold one box which was not disputed, it was claimed that all the rest was for purposes of sale. In the mean time the warden seemed to be more anxious to settle than to proceed against me, and suggested that if I would pay him $200 he would let up and go away. He read some papers in my presence but did not claim any arrest, but invited me to go down to Galva with him where complaint had been made for the Hinsdale shipment and where the case was to be called that day. What it really amounted to I never fairly understood, but after the warden had made his plea and court adjourned it was stated to me that the case would come up for hearing in the circuit court in October. I gave the warden no money and offered him none, but the next day I thought it prudent to ask counsel of my lawyer who was sick in Wisconsin, whither I went, passing through Chicago. I did not stop in the City, but returned there the following morning, when on going down to South Water street I was told there was a telegram awaiting me from the day before. I found this to be from my son saying that the game warden had returned and was going through the house, opening and taking out packages to the Justice office. I wired I would be down as soon as possible, but as my counsel was unable to come, I started to look farther. I ran on to F. M. Smith, whom I had known in the same business with myself and with whom I had dealt considerably in former years, and he said he could take me to a lawyer who did all his business. He would not be at all extravagant in his charges and would be an able man to conduct my defense. I saw him and he consented to come to Kewanee if I found that I needed him when I got home. When I returned I found my son had put the case in the hands of J. K. Blish, but Mr. Blish thought that if he was not too high priced, I had better let the Chicago lawyer come down. In the mean time the case had been adjourned by the Justice here till I could get home and make my defense. I wired the lawyer to come down. F. M. Smith wrote me that it was going to be an important case and asked me if he had not better come down also. I answered him that I did not need him. Nevertheless on the afternoon of the day previous to the trial, both Keep, the lawyer, and Smith came on and proceeded to make themselves merry with benzine and to inform everybody far and near they met what an important case would be called in the morning. When the case was called Keep followed the witnesses with great assiduity, few sentences passing without using the peculiar words, "I object." His versatility on the floor was melodramatic. Sometimes we thought he had started out on a cake walk, or was about to execute some new dance. When he had got his argument well in hand, he swung it around like a club with such vehemence, the audience became dizzy with his repetitions, and it was a delight to them when he sat down. Doubtless he meant it to be well shaken before taken. The case was argued through the day and evening, and taken under advisement until the following morning, when contrary to all belief and all law the Justice convicted me and put me under ten thousand dollar bonds for trial in the County or Circuit Court. Several packages which were made of galvanized iron and air tight were broken into and some of them were partially thawed but they were allowed to be replaced in the freezer and were not materially damaged, and all of them were permitted to remain, under the assurance that they would not be disturbed by us until the call of Court and subject to its order.

Lawyer Keep at the trial did not show any remarkable talent or skill in addressing the court as he was evidently under the influence of drink, but when next morning he started for the train to go home, he had revived far enough to put in his bill for services, which he said was $500, and on my protest of its being exorbitant he offered to reduce it to $400. I gave him $100 and told him I would write him about the balance in Chicago. Smith came up and walked down with us to the train. After he was gone, I sat down and wrote both to Keep and Smith and asked Smith to go and see him on purpose for me, if he would not reduce the remainder which he claimed down to $200. Smith replied he had seen him and that he would not. Keep also wrote me that if I did not send him $300 more in twenty-four hours, he would draw on me therefor. I concluded to let him draw, that is, by implication silently, and when the draft came it went back unpaid.

Then the summons came for trial at the Circuit Court of the case in which Keep claimed $400, remaining for his services at the preliminary trial. It transpired before that time, that Smith and Keep went into an agreement during that preliminary trial, in which I now believed that the whole stock of game which was seized would be sold in Kewanee, and Smith was to be the first to buy in the whole stock at nominal prices and take it to Chicago, while Keep was to make out an enormous bill and get the cash out of it for his services. If they had shunned the saloons they might not have gone entirely astray. In October the case came up before a jury. There were only three witnesses, two for Keep, being Smith and himself, while I myself was entirely unsupported. Manifestly the preponderance of evidence would be on their side, and as Smith and Keep swore positively that I agreed to pay the remaining $400, the jury felt the gravity of the case very keenly. The two witnesses were asked if I did not correspond with them in regard to a reduction of the charges after they returned to Chicago, and they said I did not, that they never heard from me after they left Kewanee. After further questioning, Smith admitted he believed I had written something to him about it but would not admit the talk of any reduction. We showed by the testimony of several witnesses that Keep was of little or no value to me as counsel, that he was more or less under the influence of liquor, and as one witness expressed it, "had on a jag," all of which the jury rated at its full value, but they were impotent to overcome the combined evidence of the two witnesses. At this point the unexpected happened. We had subpoenaed two witnesses who, on coming to court, and being questioned, did not appear to throw any additional light upon our side, and we allowed them to go home. The plaintiff's assistant, Ladd, caught that up as a proof that they would be useful to them, and asked the court for a recess in the evening till nine o'clock the next morning, when they said they would certainly be able to produce them, and the court granted their plea. I had previously been telling my counsel that the witnesses statements were not true, that I had corresponded with each of them, soliciting a reduction and that I had letters at home to support the fact. I had intended to take them with me, but we drove across the country, and I overlooked getting them in the hurry of getting off, but the letters were not in hand, and the gravity of the case became more apparent. This recess gave us the desired opportunity and we sent by the same constable who had the subpoenaes for the returned witnesses, a request to my wife to send over the letters, telling her where they were. They found only one but that was sufficient, inasmuch as it described my inquiry of Smith to go and see Keep for the desired reduction and which Smith said Keep would not grant. Re-enforced with this letter, counsel read it to the jury when first called in the morning. The two witnesses did not appear and no further witnesses were called. The case was argued sharply on both sides and went to the jury. In a short time they returned and brought in a verdict for the defendant and in private assured me, that if the hundred dollars had not been paid, they still would not have allowed him anything.

On this occasion Brother Comstock of the Cambridge Chronicle, bubbled over and indited some doggerel, parts of which we reproduce:

"Well, Brother Merritt showed Keep some Henry County justice, thanks to the jury."

"Keep is dear and Keep is cheap,
You can tell seeing on the street,
But he's the consarnedest cheat
In Illinois with legal feat.

"Alas, alas for Mr. Keep,
We'd think h'ed want a winding sheet,
Or better far, a Rip Van Winkle sleep,
And then he'd be a thing concrete."

Before the time of the Circuit court to convene the State's Attorney conceived a plan of bringing me to trial on information and not by indictment, and thereby taking away the rewards from the Game Warden in case of conviction at its regular session. With this purpose in view, I was called to court early in the fall without the knowledge of the Game Warden, and although he was notified later he could not arrange to come nor would the State's Attorney wait for the Circuit Court. On this trial no witnesses were called, but those who had a part in the seizure of the box of game that went to Hinsdale, except my son, and he did not remember of any illegal shipments beside this. This was evidently illegal, and the jury brought in a verdict for the plaintiff for the amount of $5 for each bird contained in the box. This was the only judgment that ever was rendered against me in Henry County.

In a few weeks the main call at issue between the warden and myself was the right of the warden to take or not to take away the whole stock of game which I had in my freezer, which he claimed. Scarcely any witnesses were called in this case, and the fact was discussed at considerable length, whether the sale of the box at Hinsdale was prima facie evidence that the balance of the stock was for sale. I was a witness and Ladd asked me if I had not within the last few months bought any game in the country round about, at Galva or at Atkinson. I replied that I didn't handle any birds from those places. "Well, then, is there not some place within the State where you have bought?" I answered "Yes." At this admission all eyes were open and the audience reached forward and pricked up their ears. "State, then," he said, "if you please, where you have bought in that time." I answered that I had bought birds that were shipped me from New Boston. "How many?" "Several boxes, but the shipper informed me they were brought from Iowa across the River." "Have you anything to show that he said so?" I said "Yes, I have a letter." "Let me see it," he said. I took it out and reached it towards him, when he said it didn't matter, he didn't care to see it. I was questioned no further, and the case was argued with no tangible evidence except of the one sale. The jury was out a few hours, bringing in a verdict for the defendant. This decision was so unexpected to the plaintiff and his advisers, that it seemed for awhile to have thrown the game clubs off their balance. No further demand was made and I proceeded to sell my stock as usual. In October the quails were put on the market, a large amount of them and sold well. Prices continued high all the season, the highest for chickens and quails at that time we had ever known. Buyers took stock readily and put it into consumption. By the time the spring opened we had realized out of it over $20,000.00. During all this time the game clubs had not been entirely idle. They had raked the law over and over again to see if there was not some provision to stop this indiscriminate slaughter of birds. They discovered in the game laws the clause which permitted dealers to receive game from other States between October and the February following, specified for the sale of the said game "in the villages and cities of the State." This had heretofore been overlooked and it was not believed that it would be illegal to ship out what was legally shipped in. If strictly construed, however, it did not permit birds to be shipped out of the state. Nevertheless, the effect would be that if dealers outside of Chicago could not receive birds, then they must either go direct to Chicago or New York. This law was not attempted to be enforced until the following year. If it had been enforced in 1895 the ruin of outside dealers would have been complete. The game dealers in Chicago were prompt to seize this opportunity. It gave them a club by which they hoped to demolish the trade of outside dealers. Then how were they to escape themselves? They sought the Game Warden, they pursuaded him to lie still and not to disturb their goods, while he seized all the goods of other dealers and put the proceeds in his pocket as far as he possibly could. The business was consolidated in the hands of three or four parties. The rest of the dealers in Chicago stood still to see what was going on. If they had anything it was confiscated, they could not or would not pay the Warden to let them alone. Game shipped to these three or four parties was taken care of. Large quantities arrived every day. Did it stop there? Certainly not. Chicago could not use one-third of all that arrived. Boxes were taken in and their contents transferred to new packages with new labels representing everything under the sun but game. Express Companies received them, and after a while shippers from outside of the city could not get a pound past Chicago. Yes, they could. You could ship to these dealers, which you had a right to do, and they could tranship, but they demanded double commission, and every possible way of escape was used not to fall into their hands. The game business quieted down a good deal and the profits derived from confiscation were materially lessened when once it was found out. No further shipments were made to that firm and not every shipper found who they were that did receive game. When this business dropped off so that the Wardens could not confiscate much more goods, their dividends were perceptibly lessened, and the premiums they received from these few dealers were hardly sufficient to support them, but the dealers could not do any better, they were already robbed. Public sentiment was awakened. The

Western States could ship directly to New York. This they proceeded to do, and the plum was rapidly disappearing from the dealers in the City. What was shipped directly to New York brought big prices with no risk whatever. What was sold in Chicago did nearly as well and the dealers flattered the shipper and dared the informer under cover of permit. They fought sharply with two-edged blades which cut off others, while it supported themselves. But public sentiment which had begun to accumulate for some time, now rose in revolt. The partridges of the States of Minnesota, and as far North and Northwest as the Railroads reached, were simply being annihilated. One or two dealers had controlled the market with such persistency, that an omnibus law only could save the birds which were crowded in in such quantities in the Eastern Cities, that they scarcely brought half they were worth. Both sides fought vigorously, but the State won and saved what game was left. Prices rose to a prodigious height, but the birds did not come. The leaks which all presumed certain to be found, were thoroughly stopped. Then in the following winter Kansas and Nebraska revived their old laws and put them in shape to enforce them. For the past year or two birds are said to have increased considerably, particularly in Nebraska, and until the prairie grass is rooted out or the laws forbid shooting small and immature birds they will continue to increase, or until population runs them out.

We commenced shipping in the fall of 1896, much as we did in '95, but in much smaller quantities. The demand for game East was very urgent, but not at so high a figure as the year before. So many dealers had started up in the West, we had great difficulty in securing the supplies we needed. The memory of the past year also operated as a spur. When we thought along in January we could spare a few barrels profitably, we did so and we sent them to New York by freight. We had some poor stock it was necessary to put off before spring and we sent these along with the sound birds. We sent them by freight. We were somewhat surprised to hear from Chicago that the first shipment of two or three barrels of prairie chickens had been seized by the Game Warden there, and we were so confident of our position that the shipment was legal, we put the case in the hands of a lawyer to collect damages from the Railroad. The birds were not taken under a warrant, and so far as we can learn the Warden sold them for his own account and held the profits. Neither of these two acts was legal, but the Railroad Company defended themselves on the plea that the goods taken were contraband and no damage was obtainable. We protested against the Railroad Company giving them up without a warrant, and in later seizures the Warden was compelled to use a warrant, in which case he could not sell the goods for his own benefit. We started on a new plan. We had orders for a line of goods which we wanted to move, and there being no hurry for their use, we did not want to pay express charges upon them. It occurred to us that a poultry dealer who was shipping often might take the goods and forward them himself for us, and by marking the barrels poultry, they would escape the vexations of seizure and trouble and expense afterwards. The plan worked for once, then another shipment of seven barrels followed, and they were seized with a warrant. The Justice ordered the warden to hold them in cold storage till legal time elapsed before the sale. As soon as I found when that sale would come off, I ordered a dealer to buy them if he could and they went below market price, but values were booming. The quail were in fine condition, two barrels of them and they sold at full price. The partridges were very poor, five barrels of them, and they sold for $1.00 per pair, double the value in any market that I knew of. We appealed the case and attempted to contest it, but it was called surreptitiously without notice to us or any public announcement as there should have been, and we lost. There was a determination of the Court to give us as little chance as possible, and if we had succeeded then it is more than likely we would have lost later on. Smith conceived the idea that he could get us up there through the medium of a friendly letter on the plea that the dealers were going to make up a sum to pay my losses. We, however, did not go as we had lost all confidence in him, and when once off our base, we could not defend ourselves.

The next move made by the Warden was either to indict me or sue for heavy damages. The seven barrels that were seized were carefully counted and on this count and some other imaginary counts he proceeded to sue me for several hundred thousand dollars. The birds sold realized some seven hundred dollars. Before I knew of the last seizure I had another shipment of five barrels on the way. These by quick action I secured in Chicago before the warden knew it and right under his nose, and transferred them not five minutes before he ascertained where they were. When the trial came on in the fall for offering to ship the game out of the State, a new Game Warden had taken the place of the old one. He was very sanguine of his success of connecting me with all the counts he had made up. The State's Attorney worked with him for all he was worth. The barrels of money the Warden said he would make, or had made, were not very definitely known by very many where they were to be found if he was to be believed. He came to town and examined the poultry man who shipped the game and who was always a ready tool for all such transactions that promised him dividends. However, he did not appear at court, but in the appeal that afterwards was thought necessary, he testified that the reason I gave him for using his services was that it was illegal to ship. Nothing further from the truth could possibly be. I distinctly told him more than once, that the shipment was legal. Until the last shipment I had not looked carefully into the law and had not weighed the force of that provision which allowed game to be sold in the villages and cities of the state. I saw the situation now as I never had done before. The law clearly defined the provision, and while it appeared no different to ship direct than it would be to re-ship, if the law must be strictly construed, then I had no remedy unless I could show that I was an agent for the parties that bought the goods, and if I shipped for them then the burden fell on them, there where they could not be reached. In that case I was clearly selling the goods as I had a right to do in the markets of the State. The dealers in New York sent on orders and the burden of proof was for us.

We took depositions from the men who had ordered and they were altogether favorable. To the credit of the State's Attorney it may be said that he did not press the interlocutory hearing very smartly and when the case had progressed to the end of examination of witnesses, we produced the depositions in which the two parties to whom the goods were consigned swore squarely that they bought the goods of me and ordered them shipped to them and that they were their property. The prosecution produced no other witnesses than those who received and counted the goods in Chicago, and the Railroad Agent that had shipped frequently barrels of goods for us. In these cases we showed that the shipments were of other game that was legal to ship or that it contained poultry. Previous to the trial, the Wardens had made repeated statements that they could show that I had twenty or thirty men constantly all over the County buying all the game they could get hold of, and that what was not in the fields alive was dead and in cold storage. So far was this from true, and so impossible to prove, that not a single witness to that effect was produced. Since 1882 or '83 I had bought but very few birds of any kind in the State, had confined my purchases to West of the Missouri and to Wisconsin and Minnesota and Montana, and had not had a man in my employ hunting for thirty years past, and then only once. The complainant argued very strongly that the place I made the sales was not a market place, that it was my duty to take the birds to the center of the city and there sell them, which clearly I had not done. The Judge set this point at rest, declaring that if my ice house, which had been used for thirty years for that purpose, was not a market, it was impossible to see where there could be one in the streets of Kewanee. The jury was out but a short time and brought in a verdict for defendant. This ended all litigation about game birds of any moment in Henry County up to the present time. We still had a good many birds in possession. If the New York law held good that all game held after February 1st could be seized and there was no redress, then it would be fatal to the rightful possession of birds at any time when it was not legal to kill. Furthermore that decision held that if there was a proviso of allowing five days to dispose of the goods in storage, that constituted an insuperable barrier against any claim for carrying them longer because the time was specific and the law must be strictly construed. We decided to dispose of what we had and in various ways we cleared the house before spring. The Express Company afterward in '97 and '98 refused to guarantee safe arrival and since then all the State laws have been supervised by a Federal Statute which makes it legal to seize anywhere game illegally shipped. Game went rapidly out of fashion. The hotels and restaurants refused for the most part to put it on their bill of fare and except for short seasons they will supply only what is brought to them by their guests.

It now remains to be seen whether the promises that flocks of game will be speedily recouped to any material amount are justified or whether the prosecutions were started too late to save them and were primarily to fill the pockets of the Game Warden.

It also remains to be noted that if the law actually sustains and is intended to sustain the right of seizure of any game reshipped from the State that had been allowed to come in under law, then the Game Warden which seized the game in the winter of 1896 must have been woefully off his job in not seizing our game in 1895. The law was the same as in 1896. Shipments were made in 1895 without any concealment and without any suspicion that it was illegal. The goods were plainly marked on the barrels what the contents were. They were shipped largely by express and many by freight. The business properly culminated that winter when we sold the largest amount of birds we ever possessed and the prices were the best. In the few years that followed there was no year when prairie chickens would not sell wholesale at $1.75 per pair. The demand was great even at that figure and what does not often happen we sold small summer birds as high as $1.30 per pair. The goods were well kept, some of them for two years or more. If Smith had worked up his plans in the fall as he failed to do in the summer, there is no telling what might not have happened. If Smith and Keep had kept whiskey out of them, and taken the Game Warden in as a partner, they would most surely have accomplished their end thoroughly, such as could not come in their way again. They became back numbers by standing still.

PART III.

EVOLUTION OF THE GUN.

The gun is an autocrat. It can make or unmake nations. It may be a toy a boy can play with, or a Krupp gun with its shot heard round the world. It has rung all the changes from joy to sorrow, despair and death; it has been the herald of the birth of a Prince or the death of a warrior. It has set up new constitutions, it has dissolved old ones. In all the exigencies of war it has been the chief arbiter; in commerce it has led the way to unknown seas, awakened the slumbering energies of dying or prostrate peoples and put them in the way of new discoveries and undying hopes, but it has had to bear the reproaches of war, the garments rolled in blood, the misery as well as the envy of those it has put down. Evil has followed the track of the good; love has surrendered to hate and tragedy has been the end of triumph. Woman has been blessed and cursed with the same weapon. In the councils of the nations she has been honored and her rights upheld, only to be assailed and overthrown in the confidence and seclusion of home. Lavish as has been all its arts to destroy human life, its real service is to save it with the combined skill and invention of centuries. Governments only can handle artillery and this formidable weapon protects state from state and nations at war with each other. The smaller arms are more scattered as their cost is minimized in the hands of individuals. They serve varied and important interests in the procurement of law and order, but they cannot reach the privacy of home and they cannot enact penalties before a crime is committed. Hunting with fire arms has become a national sport. The history of the gun, however, does not begin with the field and forest. Game taking seems to have been a very early diversion for kings and princes. All the nations of the Old World that had vacant lands within their borders, followed the chase with hawk and hound, and all the devices which they had of bows, arrows and spears, and of hunting lions, tamed and brought to such skill that animals and birds were readily captured. From the employment of field sports to purposes of war the step was easy. The barbarians that came down from the North and overran the plains of Gaul and Spain and Britain and finally blotted out the Roman Empire, were just as active and industrious hunters as were the cultivated peoples that dwelt along the Mediterranean. Fire-arms was not the invention of antiquity. The nearest approach after the beginning of the Christian era was the rushing, sputtering fire cracker of the Chinaman or the thundering noise of the Greek Fire. The invention of the Chinaman still survives through all the ages of more than two thousand years, and may be said to be co-incident with the remote origin of our present gun, which it anticipated but did not have the genius to discover. It is remarkable that the peoples who made war a pursuit, like the Assyrians and the Persians or the Greeks, who exhibited such skill in the fine arts of sculpture and painting, did not improve and develop the plainer arts which lay at the foot of chemistry rather than alchemy, or apply the important uses of iron rather than stone and bitumen and for a better purpose than walled cities and towers of Babel.

The origin of the gun dates back to the thirteenth century, when the long wars that shook the foundations of states had cemented or destroyed them in blood. Lighter and less effective weapons had preceded and the student of history will fail to find the time or place when some form of warlike weapon did not exist. The Garden of Eden furnishes the background for all subsequent investigation of the character of the primitive man in the first weapon he had ever known. Weapons that kill are the living utterances of a nature that is brutal. Did then the curse of blood fall upon man as the blight of thorns and brambles fell upon the soil, so that his nature became simply rebellious against the Divine authority which drove him out of the Garden? We may well believe that the labor which was pleasant within became wearisome without and the curse that made man a vagabond, made him also an anarchist. What visions wrapped his soul we do not know, but Milton has pictured his despair in the glowing words of Paradise Lost:

"They looking back all the Eastern side beheld
Of Paradise so late their happy seat,
Waved o'er by that flaming brand.
They, hand in hand, with wandering step and slow,
Through Eden took their solitary way."

The Bible text makes the brand a flaming sword "that turned every way to guard the way of the Tree of Life." Consider now the two delicate souls finely wrought by the finger of God going out as outcasts from the only home they had ever known, with nothing of skill of handicraft, encumbered with appetites that nature thrust upon them unsatisfied burning in their soul with distrust of everything they called their own, what else could we expect but that the spectre of blood should have been forced into every fibre of their being. That terrible beacon light revealed to them a hand to hand encounter, against which Divine vengeance offered no prescription, rolling before their eyes in fitful gleams on the dark clouds where Nature had become hostile, the very weapon which in their bewilderment and consternation should haunt them and their posterity forever.

From this primitive origin, through primitive nations the sword has descended practically unchanged to the present day. Doubtless the first weapon man used was the sword. Its use for domestic purposes soon came to be manifold. In the establishment of sacrifices it was a most pressing need. Abraham took it into the mountain with him when he was called to sacrifice his son Isaac. It had a double purpose in war for it was used in acts of offense and defense. The Israelites were a pastoral people dwelling in tents and moving from place to place as their herds found suitable sustenance. In time the herdsmen of one tribe came in conflict with those of a neighbor and war sprung up. Many a quarrel was ended and many a knot was cut with the sword. Their neighbors were warlike and in a sudden attack might wreck their frail homes and send them out to perish in the desert.

Fifteen hundred years before our era a colony of Hebrews settled in Goshen in Egypt. They came from the land of Ur of the Chaldees, on the right bank and near the mouth of the Euphrates, which empties into the Persian Gulf, and about seven hundred miles directly west from their starting point. These were afterwards known as the people of Israel. They remained in the country and multiplied till a great famine prevailed and they were compelled to purchase corn from the Egyptians, when they became bondsmen in Egypt. After four hundred years they were driven out, wandering along the Red Sea and the desert till they settled on the East side of the Jordan in Palestine, fighting the Canaanites and the Philistines who occupied the outside rim or shore of Phoenicia. In time they became large owners of land on both sides of the river and they met and intermingled with their neighbors in some sort of treaty for mutual protection. Eventually they became a great nation and were ruled by a king, and Jerusalem was the metropolis of the Jews, which was taken and destroyed eleven times, up to and including its capture by Caliph Omar in 637 A. D.

The weapons of the Jews were the same as that of the Assyrians and Babylonians in that the sword played a conspicuous part, and as was represented on their monuments. It was worn in battle on the left side and hanging at the waist as nearly level as possible. They had also lances, spears and javelins, as their sculptures exhibit, and in addition another weapon which was to become conspicuous for more than three thousand years, and goes far to show that its birth was contemporary with that of the sword. This was the bow, and archery grew up from its use and prevailing practice. The primal man was alone, Nature was antagonistic. The bird flew; man's arm could not reach or overtake it. The wild beast fought him or ran away from him. To capture either he must increase his own strength or diminish theirs. Swords were not always powerful to defend or restrain enemies, but they were singularly defective in pursuit. The spear and the javelin wore out the endurance of many lives. So far as they could reach they shortened space, as telegraphs and telephones obliterate distance today. No war could hope for certain success with the sword alone. In the struggle with wild beasts, man was more frequently subject than lord. Prowess which was confined to physical endurance was no guarantee of success. The better weapon would be one that would reach the greater distance, or whose flight was more rapid. Man reasoned early that if he could employ any specific quality of matter, the simplest even, that of the tree for instance, say its elasticity, in a weapon, he could surmount the fleetness of foot and wing. In this attempt he discovered the bow, and it may be said to occupy the middle kingdom between the sword and the gun. The bow was the first weapon that appealed from hand to hand conflict, and it would be easy to follow it in the important part which it held, passing down through civilized and uncivilized races till the gun of modern times took its place. Necessities of existence furnished the first weapons. As families grew and settlements were extended the whole earth was overspread with husbandmen, who for self defense made common cause for common interests and regulated and settled those of private individuals. In time the older and more capable individual was chosen to be a patriarch. These heads of tribes did not always agree with each other and they were compelled to fight for themselves or move away. No doubt Abraham moved from the early seat of the race and came into Palestine from this very cause, but the cause became efficient in a little while again, when he was fain to separate himself from Lot, giving him his choice, which fell upon the lands of Sodom. The Assyrians in their representations of animals, and especially lions, chiselled in stone with great skill and accuracy, and their gold-smiths wrought the most exquisite articles of personal adornment in their shops. We may recall Byron's mention of them in the lines beginning:

"The Assyrian came down like the wolf on the fold,
And his cohorts were gleaming with purple and
gold."

in allusion to the purple murex which the Phoenicians drew from the waves of Tyre and elsewhere, and to the current trade of the smiths, also,

"The sheen of their spears was like stars on the sea,
When the blue wave rolls nightly o'er dark Galilee."

The spear was a native weapon of the Assyrian. They early became noted for taking up arms against their neighbors. The inhabitants of Assyria were soldiers outside of Babylon whose people were inclined to more peaceable pursuits and the exercise of the arts then known. They copied in sculpture what the soldiers exhibited in the field. The finest friezes ornamented their temples. The archers were shown drawn up in battle in close columns with their bows bent and ready to discharge and their faces exhibit the quiet firmness and assurance of well tried soldiers. The use of the sword was no doubt supplemented by the bow. Sacred history is full of exploits with the bow. Esau, it is remembered, took his savory meat with bow and arrow. Of Saul it is declared that the battle went sore against him, the archers hit him and he was wounded of the archers. Next to God David put his strength in the bow. David and Jonathan's friendship was knit together by the trial of the arrows. The bow minimized distance and time, but the sword has always remained an adjunct of war. It is a symbol of vengeance and its mandate is blood. It has followed conquering armies always. It has reddened battle fields with slaughter; it has sacked cities and filled with brutal lust the bosoms of the conquerors. Cities were razed to the ground and plowed up and the last spark of life was quenched with the sword.

The oldest inhabitants in the historical period were the Assyrians. Their records are meager beyond the story of the monuments and one historian, Herodotus, with scattered allusions by one or two other writers. The subjugated lands to the East were too poor to furnish them the revenue they wanted and they turned their faces to the West to the wealthy peoples that had grown up since Abraham's time along the shores of the Mediterranean, and in a few years Judah had become subject to Assyria and Nineveh had become a great city till it was taken and burned by the Medes and Babylonians at the close of the sixth century B. C. and Cyrus the Persian became the great king.

This vast kingdom between the Caspian Sea and the Persian Gulf was in a constant state of war, either with the mountainous Scythians on the North or with the Mongols and some mixed races on the East; and with the repeated rebellions of Egypt, whose territory she claimed and lost and claimed again, the limits of Persia were often circumscribed into reduced areas by the fortunes of war, and she was no wise fitted for foreign invasion. Nevertheless Xerxes in his desperate ambition led the largest army into Greece that ever had been seen under one command at that time, which the Greeks destroyed and the fleet and sent the trembling king a fugitive back to Asia. Xerxes' invasion occurred 480 B. C. In the interval between that event and Alexander's conquest of 146 years the Greeks had been increasing and drilling their armies for the struggle and the punishment which she was to mete out to Persia in the overthrow of her possessions and renown. Alexander's conquest began in 334 B. C.

The Persians used the same weapons as the Greeks, but the weapons of the Greeks were better manned. The spear was the main weapon of attack. The sword came in when the enemy was halted or wounded. Moreover the bow cut a controlling figure with disciplined troops. The army of Alexander was fully supplied with weapons that it knew how to use. It was skilled in resources. Alexander was more than resourceful; he knew the full value of food and clothing to an invading army. Besides the firm discipline he did not fail to impress upon them the fact that every dissatisfied soldier was privileged to return to his home. The glory of conquest was held out to them in such glowing colors that pride in success overbore all fear of war. The bows he used had been thoroughly tried long before he invaded Asia. They were of yew of the utmost spring and of the length of nearly six feet. Only men of the strongest muscles could bring them to their full tension and constant trials and exhibitions had made skilled archers of them all. Their spears were long also, the length of eighteen or twenty or even twenty-four feet. They were drilled to form the Grecian phalanx of eight soldiers deep, or in emergencies to form them into sixteen. Withal the phalanx was a solid body with only limited spaces between the ranks and this was fully covered by projecting spears. The spears were like javelins which could be withdrawn after impact if no lodgment was effected. They were shod with iron points, while the Persians in the great scarcity of that metal used many substitutes which their invention was able to create or supply.

There is no doubt that Alexander was well provided with military engines, scaling ladders and war chariots when he left his country. These were in no small degree the pride and power of the Grecian nation. With these he broke down the walls of Tyre and Gaza. His fleet followed along the shore till he had reached Egypt, where it is probable they were transported in the canal that was then built across the narrow isthmus to the Red Sea, from whence the fleet later passed on to the mouth of the Persian Gulf. Alexander's reputation had preceded him so that his march was easy. Most cities opened their gates. After a visit to the Libyan oasis and receiving divine honor he returned along the route to Phoenicia, then traveled eastward to the mouth of the Euphrates where his true expedition against the kingdom of Cyrus, now in the hands of Darius, commenced. With the taking of Babylon, Susa and some neighboring cities and the death of Darius, he set out on that long journey to the North through the country now called Afghanistan till he had reached the River Jaxartes, near which he built the Caucasian Alexandria, the second of that name, destroying all opposition as he went and taking tribute and coin of the cities he entered, then passing the winter on the Oxus, he started southward till he reached the Hydaspes, an eastern branch of the Indus, expecting soon to proceed down the Ganges, both of which rivers flow from the Himalaya mountains where his soldiers refused to go farther and decided him to return over another route down the Indus to the Persian Gulf. Only this refusal of the army stopped his march to the Indian Ocean. What cities he visited at the extreme limits of this route is not known, but his soldiers reported that they passed near the Indus one so well defended with a species of fire thrown from the walls that prudence forbade their attack, and it is surmised that it might have been the original Greek or Chinese fire. Alexander was warned not to enter Babylon but he persisted and entered and in a drunken frenzy perished at the age of thirty-three and after an absence of 11 years from Greece. In this time he had traveled over four thousand miles and taken as prizes from the cities he captured over fifty millions pounds sterling. In it he became acquainted with all the trade routes which had been established before the conquest which led into China or India. It is certain no natural barriers of wood or wild opposed his passage. He followed rivers when he could, he crossed them when he needed; the great plains and water sheds disappeared behind him as the nations fled before him. Wandering tribes surveyed him in the distance as the coyote looks down from the hills upon the weary traveler. The gates of the Caucasus trembled with his phalanx to the shores of the Hindu Kush, across which he swept for twelve hundred miles to the Gulf, not a man, not an army save the worn out and disheartened Darius and the feeble Bessus, whom he left early in his journey, blocked his way at any time. No wonder when he surveyed the route he had traveled and the dangers he had overcome he began to believe with the oracle in the oasis that he was the son of Zeus and not of Philip. He had smitten Persia with the heel of a conqueror, had repaid his country a hundredfold for the crimes of Xerxes, but his ungoverned self stood before him which he could not shake off.

Where were his victories? We shall find them mainly in Alexandria, the Egyptian Alexandria, which has been the metropolis for the commerce of three continents for 20 centuries. In the library which established his fame till Omar, the Caliph, set it on fire. In that Scythian wilderness hitherto unexplored and unknown save only from the innumerable hordes that issued from its prolific bosom, presenting a continual menace for centuries from Kanush to the Yellow Sea. In those immense stores of coin which the Persian kings had been hoarding for centuries, and which now became the prize which the succeeding generals carried to their native land to redeem it awhile from decay. And lastly, the great scope which his invasion covered, more than two thousand miles from Macedonia, throwing alien peoples in contact, in morals, in primitive inquiries in science, in universal acquaintance with each other which the succeeding despotisms never entirely lost. Alexander was a mighty sequoia among the trees of the forest, but its branches were broken and scattered, its heart decayed and over the sapless trunk parasitic plants had builded bowers of green leaves and hidden its squalor. On the topmost spire the woodpecker with its flaming crest tapped the hours, tap, tap, tap, and in the silent pauses heard the echoes like a bell tolling the death of the monarch. The grey wolf heard the dropping debris and listened for a while as it fell piece-meal from the rotting limbs, then trotted away in the shadows. Obscured in silence and mystery the trunk shrank away, a lifeless mass, till a sudden gust swayed it to one side, when with a groan it broke and in one mighty crash which rung in countless peals through the woodlands, it fell crushed into fragments.

Suppose that Alexander had changed the route of his invasion and had gone Westward rather than to the East, what obstacles would he have found that he did not find in his campaign against Persia? Would Italy have stood in his way? Why, it was but four hundred years since it was established on the Tiber, and the first inhabitants who settled along the sea coast were Greeks. Many of the inhabitants were Greeks, and their sympathies were all with their own nation. The government was made up of robust men and well drilled soldiers, but the army had not the solidity nor the unity and discipline of a despotic leader like the son of Philip. Like all constitutional governments, the different functions were filled with men of short service, and as when Caesar came later any ruler would have found it impossible, as Caesar did, to cut loose from his base unless he cut loose from the government and became a dictator. No doubt exists that Alexander had conferred with Kraterus many times on the subject of universal empire. His cavalry would have been more than a match for his Italian neighbor, his weapons at that time were equal to the best, and he would have been so close to his base, he was virtually on home soil. Then he would have crossed the mountains and Gaul and Spain would have been at his feet, when he could have swung around into Germany, passed the Rhine, and following the Danube, been on the confines of Europe and Asia, whither following the line of the Black Sea he could have overrun the tribes of the Caucasus, trodden the plains of Scythia, which he had so long planned, and renewing his old route through Persia would have soon been on the Gulf. Then he would have taken the advice of Pharasmanes, the Chorasmian Prince, when he passed through Bactria on his expedition, and passing up the Indus to the Hydaspes would have crossed to the headwaters of the Ganges and following it to its mouth washed his foaming steeds in the Indian Ocean. If he had not done this he would have turned to his left in Gaul, passed through Spain, across the Gibraltar into Africa, where he would have been welcomed in Egypt, the oracles would have pronounced his origin divine, and Arabia would have been the last stand, instead of the first, for human freedom, as he had proposed when he perished at Babylon. Nothing less than the then known world would have met his ambitions when he came to believe he was of divine origin, the favored child of God.

But what of the new dominions of Alexander which at his death embraced three continents,

"From Macedon to Artaxexes' throne"?

This mighty structure in its political unity fell to pieces in the space of two years. In 80 years domestic discord sprang up worse than a Kentucky feud. The several parts of the Asiatic confederacy broke into petty kingdoms and provinces and formed governments of their own. Then the barbarians attacked them separately from the north and east. South of the Caspian sprang up the Parthian, until he spread his kingdom over the great plain of Babylon and the Tigris valley. The Bactrian disputed for the lands along the Indus and the regions ruled by the Indian king Porus. Northward and eastward he extended his sway into Sogdiana and the region south of the Oxus. Only in the southwest, in Egypt, did Ptolemy remain faithful to the Greeks. Bactria united with Parthia, and now commenced that struggle with Rome which lasted for near five hundred years till the latter obtained the sceptre of the world. Macedon fell to the Romans B. C. 168, Greece proper, 146 B. C., and Carthage the same year, but Egypt, which had been plundered so long by the Persians, remained faithful to the successors of Alexander for three centuries till the Romans established suzerainty over her about thirty years before the Christian era. In that time Egypt acquired a prosperity which she had never before known. Scholars flocked to Alexandria as they had before flocked to Rome or as they later flocked to Constantinople. The art of war had not lost any popularity, neither had it gained any decided prestige. No new discovery had been made or new invention perfected. It is certain the conquered nations laid none down at Alexander's feet. Such an occurrence would have given a captive immediate liberty, would have put him at the head of the army or clothed him with imperial authority.

Egypt was a land of antiquities, mellow as wine with age and ripe with the treasure and tilth of a bountiful sun. From her open throat sprang the lewd and luscious tongue of the Nile, lapping the seas between two mighty cheeks of sand.

The earliest ambition of the Egyptian was to rest. If not in this world, at least in the world to come. For this they built those pyramids, to cover their mortal remains, which they fondly hoped would be imperishable. They wrapped the decaying body with many folds of linen filled with gums and spices, and enclosed in coffins doubled and trebled, resting in a stone sarcophagus of great weight placed in a mortuary chamber, sealed and secured by immense stone slabs in the heart of the pyramid. They hid away in the walls statues of the dead, often in great number, that in case of the loss of the body the soul could return and find its continuance in the image without reincarnation in beast or reptile. From puberty to old age they began or continued to lay aside the cerements of death, and the skill of king and architect was sought to make the chambers of the dead unknown and inaccessible to the living. They gave their labor to bondsmen, their leisure to the Nile, dreaming away in the lassitude of sultry hours of the rich harvests which flowed unearned from her prolific bosom.

The Egyptians were early acquainted with the art of warfare. Their army consisted of two divisions, a cavalry and an infantry force. The war chariot with its archer and charioteer, and the heavy foot soldiers with shields and spears, swords and battle axes, and the light infantry with bows and axes and sometimes slingers, with their arrows tipped with flint. Since the conquest the soldiers became more familiar with the use of the weapons as they became more abundant. Forges prang up for their manufacture in Syria and Palestine. Iron could be obtained everywhere in trade with the Phoenicians. Grecian supremacy was rather courted than avoided and the monarchy of the Pharaohs, which had lasted for three thousand years, passed into Greece 334 B. C., and there remained till it was overtaken in 32 B. C. by the rapid rise of Rome. The prophecy was to be fulfilled, the reigning princes of the blood ceased. As it was written, "There shall be no more a prince of the land of Egypt."

Outside of Egypt was Phoenicia, whose fortunes always rose or fell with hers. It occupied a narrow strip of land running north and south along the Mediterranean, about two degrees of latitude in length and joining Philistia or the land of the Philistines on the south, and reaching the mouth of the Orontes on the north, at the time of the Persian supremacy and of its greatest prosperity. They called themselves Canaanites and were early known by the adjoining nation for their skill in navigation, their success in the industry connected with the purple murex which formed the basis of the Tyrian purple, in mining of gold and silver, especially in Spain and some of the isles of the Aegean, and more than all their traffic in the wares from one country to another in ships and caravans. They were pre-eminently traders and had no distinct purpose of acquiring territory. They opened and maintained trade routes through Persia and Arabia and Egypt, and followed the traffic on both sides of the sea to the ocean. They furnished ships and fleets on notice, now for Egypt, now for Persia, and now for Alexander. At the time of his return he ordered a new fleet from them, of ships equipped and sent to Thapsicus on the Persian gulf. They were early in the employ of the Romans, but they acknowledged the sovereignty of Egypt till the Roman arms overthrew Greece. They built but one great city, Carthage, and with it the Romans were at war from the days of Hannibal, one hundred and eighteen years, till the city was destroyed and ploughed up by the Romans. Along this highway by the water's edge had passed the Babylonian, the Assyrian and the Persian and Greek warriors from the earliest history. It was not distant from the early home of the Hebrews. It was the borderland of the children of Israel who yet dwelt there and with whose history was interwoven the remembrance of the calamities that had befallen that people. The conquest of Alexander gave new life to their traffic eastward. The Greeks went and dwelt in the land which Alexander had conquered from the time of his invasion till his return, and they developed many of the arts which made intercourse with that people profitable. The Persians saw their opportunity as their kingdom revived. They grasped at the rich merchandise that came from China, and what they could not deliver direct to the rich cities of the south and west they turned over to their enterprising neighbors, the Phoenicians. By the opening of the second century B. C. the Bactrians beyond the Euphrates, though nominally subject to Greece, carried their arms along the Indus and into part of China, and even to the ocean, and brought from the new lands cocoons and manufactured silks, the spices of Malabar and Formosa, and they traded in sulphur and bought costly furs and garments and many other things which art could covet or wealth procure, and these with the products of Persian looms, flowed in a steady stream westward to a bountiful market.

The Phoenicians confined themselves largely to the trade route along the sandy desert six hundred miles from the port on the Persian Gulf to Egypt, while the Persians followed north of the Caucasus, up the Cyrus and down Phasis to the Black Sea and the Hellespont. Over these routes sprung up the traffic which brought to the knowledge of the Greeks and Romans the Greek or Chinese fire which was the basis and the nucleus of modern fire arms. But this was not to appear very soon. Dying nations carry no inventions to perpetuate their memory. They may seclude themselves beyond mountain ranges, but no sooner does prosperity commence than the barriers are broken, and the hermit nation must throw open its gates or pass into oblivion. The Roman world was now entering on its scene of triumph. The wild tribes who inhabited the great plain of Italy seven hundred years before it was parceled out and occupied had become consolidated in one great confederacy at Rome. Two promontories here side by side jut out into the Mediterranean, the Grecian and the Roman, "two whelps that lick up the ocean foam." The Greek empire was largely bound up with the Roman. Greeks first colonized the shores of Italy. The courage, the resources, the discipline of that mighty kingdom of the son of Philip had passed into Roman hands. Rome had ennobled the march of Alexander by giving the surviving cities the freedom which he had denied them. She was a conqueror more for dominion than for rapine or plunder. All she asked was tribute and to take and keep the name of Romans. She put into their hands Roman arms, and in time expected them to adopt the Roman language and the Roman dress. In this she copied the habits and manners of Greece whose colonies first built up the cities of the Mediterranean. Roman policy was more humane and enlightened, and the Western promontory was destined to play a more conspicuous part in history as it did not so completely abridge the freedom of the individual.

The legion represented the matured service and conspicuous success of the Romans. That Rome formed and reformed her legions in such a way as they were superior to the Grecian phalanx there is no doubt, but she could never have broken that formidable organization by brute force without the employment of superior tactics.

The early Roman sword copied the form and quality of other ancient nations. Strange as it may seem there is no distinct statement just what it was, but on the monuments of the first century B. C. it was a short weapon worn on the right side, suspended from the shoulder in contradistinction from the Assyrians, who wore it on the left. The blade was from twenty-two to twenty-four inches in length and double-edged. Later it was made longer and sometimes with single edge. The main weapon, however, was the pilum, which was a species of pike about twenty inches in length, of iron with an iron knob for a head, attached to a shaft twice its length, and which when thrown against a shield pierced it and fastening thereto, the heavy iron bent under its weight to the ground, uncovering the head and body and leaving them exposed to the sharp sword of the enemy, which meant certain death. The sword when brought against it was hacked and broken or rendered useless. At this period so little mention, or so little use is made of the bow, as also it is by the Greeks, that it would appear to have lost its favor, but that the two nations used it there is no doubt. The bow would shoot many times beyond the limit of the spear or pilum and when the archers were placed on the wings or in front they did great execution. In its proper use it was necessary to fortify its point with iron, and while the western people did not have it, or only in small quantity, in the east it could be had anywhere and became an object of traffic as commerce increased and wealth multiplied. It is doubtless a fault that the Romans did not appreciate the bow more fully. The time came when the Franks beyond the Alps repented the want of it, and were driven to increase their store at a very inopportune moment, while the Roman leaders suffered great distress through its scarcity in the latter days of the Empire. There were also the cuirasses and the helmets which made the Roman soldier the envy of his comrades. Sometimes the former were supplied only to the chiefs. The helmets usually were of metal, though sometimes they were formed of leather or linen on which were sown circular plates of metal, and which early covered almost the whole body. In this case the weight became very cumbrous with the round or convex shields, so that the common soldier sometimes succumbed under it, and later was one of the causes of the fall of the Empire, in that the enervated soldiers refused to use them and threw them away, delivering their naked bodies to the spears of the barbarians.

It must not be supposed that the arms enumerated are associated with the beginnings of a great empire. Rather they are the result of the skill and discipline which had continued for centuries and had yet to carry them as conquerors to the ends of the then known world. They represent the whole science of warfare up to the time of Julius Cæsar. The legion had supplanted the phalanx. The victories that followed Cæsar's arms show us conclusively that he found no weapons superior to those that were Roman, and now that the great arteries of travel to the East had to be gone over again, their superiority was a necessity. The Roman eagles were borne along the highways that Grecian industry had builded and Grecian arms had defended. The Persian, rising up like a lion in his lair, was anew the inflexible foe of the Empire. Macedon was now Roman. Through it the legions were set in motion, on through Thrace to the Hellespont. They traversed Asia Minor and were again on the highway that skirts the coasts of Tyre and Sidon, now reduced cities lying in magnificent decay. Gradually the Roman soldier pushed his way to Persia and Armenia, and across the Euphrates till five provinces were added to the empire. There he stopped when he had reached the end of his old dominions, the ultima thule following the footsteps of Alexander. If he had gone a few leagues farther he would have struck the domain of the Parthian, with whom in after years he was to have a terrific war. But the enterprise was all too costly, the provinces were too far distant, the fruits too barren, and the successive emperors from Octavian to Trajan held with a feeble hand the subjugated lands which they would have been glad many times to give away. In 66 and 67 B. C. Syria and Palestine were annexed to the empire by Pompey, who it was said entered the Holy of Holies in Jerusalem, and these two with Egypt became the faithful dependencies of Rome when the Grecian supremacy came to an end.

Rome was now the mistress of the world; she had held Spain from the time of the Scipios; her authority extended from Greece westward along the banks of the Danube and the Rhine. She was planning a military expedition beyond the Alps. The Christian era was about to dawn and the streets were soon to be filled with "Parthians, Medes and Elamites and the dwellers in Mesopotamia." A Christian martyr was soon to appeal to Rome. Was the cruelty and bloodthirstiness of the emperors to increase or decrease with this new religion as its diffusion extended through the Roman Empire? The world shuddered at a Cæsar but it acknowledged his the best government that was known. If the dagger of Brutus had not fallen Christianity would have been tolerated before Constantine.

Julius Cæsar represents everything that was known of military science anterior to the Christian era. He was altogether too wise not to be familiar with all of the most deadly weaopns. In this respect he competed with Alexander, in personally inspecting all the arms which his soldiers carried, but he was the greater tactician and he performed evolutions more numerous and complex than were known by the Greeks. His movements were not controlled by violent paroxysms of passion or bursts of sorrow. He does not seem to have been ruthlessly bloodthirsty, and he created the jealousy only of weaker nations that were ambitious of his fame. His life was mostly spent in the camp and his first exercises were in the overthrow of the pirates on the Mediterranean. When he became consul he was entrusted with an army which was directed westward over that vast ridge of the Alps which Hannibal scaled when he broke into Italy during the Punic wars. He was now to be introduced to the wild and mostly unknown nations of the north, who were described as barbarians and who, becoming dissatisfied with the frozen and unproductive regions they inhabited, sought to conquer and dispossess the present owners and transplant their own families where they could enjoy the rich bounties of a warm sun and fruitful soil. Cæsar's record of eight years, from 57 to 49 B. C., is the most remarkable in history. In that time he had subdued the whole of Gaul, now France, except the Greek city of Massalia in the southeast, had driven all the tribes who had crossed the Rhine back to their native home or destroyed them, had made two expeditions into Britain, and while not entirely successful had been able to hold most of the island, had checked and broken a rising conspiracy at home in an absence of only fifteen months, and had written that compact and graphic history of the nations whom he had met, which has come down to us in his Commentaries. Here he had inscribed all the rude arms and arts that the barbarians had invented, and we find no trace of any discovery which could supplement or supplant the accredited weapons of former times.

There is one fact, however. to be noticed. The

Britons contested the advance of Cæsar's arms with war chariots, where the Romans appeared without them. It is not possible they were ignorant of them. They certainly had been used by Eastern nations, especially the Greeks during the time of Alexander's conquest, and they were in common use in the games of both Greek and Roman. It is possible that for the present the Romans depended chiefly on their swords and spears, the latter of which the Caledonians used as also clubs, while they do not seem to have had bows, which if they were used at all were only in a limited way against the Romans. Now the war chariot shows a more advanced state of military efficiency and inventive skill than the bow which is common to most uncivilized people, and which does not require much outlay of iron. They had iron but it was scarce and clumsily extracted from widely separated mines. It seems quite possible that the Phoenicians constructed and introduced those moving vans which were often armed with scythes among the Celts or ancient Britons. Such a vehicle could produce great consternation in an attacking army. The Phoenicians are known to have come to the Scilly Islands for tin and doubtless to Cornwall, the mountain side of the island, where tin was abundant and which they could reach following northward after passing through the straits of Gibraltar. It was in line with their trade to build anything they could sell or transport, and while the nation had declined for three hundred years the fragments were glorious and their knowledge ancestral, and it is quite possible that no weapon created for war would be forgotten for centuries. We know with what zealous care the Romans preserved the temple of Janus on the Tiber, which contained the arms of the soldiers which came back covered with glory from the war. Troy was captured in 1184 B. C. and Alexander, when he started out to conquer the world, made a visit to the Troad, where the bones of the Trojans reposed, and was shown the shield of Achilles, now over eight hundred years old, and it is said that Cæsar laughed when he was shown the sword which he had lost many years before on the battlefield. No doubt the Hebrew nation gave this trading people the knowledge of war chariots. If not, the Greeks were in constant intercourse with them, planting colonies in the islands of the Archipelago and the coast of Spain, where immense quantities of gold were brought from the interior along the Guadalaquiver, so that some have contended it was the original Ophir. They sailed among all seas and into the ocean, only going so far from land as not to be blown from sight of it, and in one instance sailed around the Continent of Africa in the employ of the Egyptian king.

In this expedition to Britain the Romans carried shields which the inhabitants of the island had never before seen. These were defensive weapons and the art of making and using them was held in common with the Greeks, but while the shield was often very serviceable it was impossible to discharge an arrow at the same time, which required the use of both hands. The Romans carried the shield on the one arm while with the other they threw the spear. In latter times shields were confined to separate ranks.

Augustus Cæsar, or Octavian, became ruler at the death of his great uncle, Julius Cæsar, and under his reign Rome is considered to have reached the limit of her greatness. It was the boast of Octavian that he found the city brick and left it marble. His administrative ability was exercised largely in beautifying the city and keeping surrounding nations in check, but he was not a warrior like Julius Cæsar. He formed great armies and sent forth many legions but he seldom accompanied them into the field, and as if to prove the theory that no government can be entirely successful without a military general who was a thorough patriot, a skillful disciplinarian and possessed of abundant resources, there broke into the Roman dominions from north to south a horde of barbarians who in the next five hundred years were to perplex, vex, and at length destroy the Empire of the world. Had the former Cæsar lived he would have treated them with such severity the borders of the Rhine and the Danube would have been respected, though his measures would have seemed harsh and cruel. At the time of his death he was preparing to punish the Parthians, who had defeated Crassus beyond the Euphrates and captured and retained the Roman standards. These Octavian or Augustus secured by diplomacy, though it cost him a journey thither, and twice he visited his legions in Gaul during his long reign. Beyond the Julian Alps and along the wide expanse of the Danube and the shorter stretch of the Rhine he did not go, but his legions were there. These two rivers were the limits of the Empire and will measure the route which the barbarians followed from the north to the south, between Scandinavia and the Black Sea. Beyond that lies the Caspian with the mountain ranges of the Caucasus between, whose defiles have been the barriers against which the barbarians have beat for ages. Around the Southern point of the Caspian is Armenia, which was the battle ground of Roman and Persian, before and after the Christian era, and between that province and Euphrates lay the home of the race. On the Eastern side of the Caspian, flowing from what is now the Scythian Gulf, in a direct line east on the 40th parallel, you will reach Cashgar beyond the Shan mountains and in the borders of China. This will give you the limits of the inroads of the Northern tribes whose attacks were so bloody and so costly to the Romans. From the mouth of the Rhine to the mouth of the Danube is approximately one thousand miles, and from the Danube to the Scythian Gulf is nine hundred, and from the Scythian Gulf to Cashgar in China is one thousand more. With the exception of this last distance the Romans had to defend a borderland of over two thousand miles, to say nothing of England, an isolated country which was held until 410 A. D. during the wars of Alaric, the last of the Roman conquests and the first to be thrown away. Before this the Romans had learned what it cost to hold in subjection a country so distant, roamed over by plundering savages, always numerous and always near. Its seacoast was ravaged by pirates, who crossed to the mainland as occasion served, and who were little better and no worse than the tribes in the interior. In their extremity the Romans constructed two walls, which shut off the north part of the island, now Scotland, from the south, intending to keep north of its borders the wild tribes by two legions which constantly guarded the fortifications.

We can judge something of the natives of the British Isles that stone walls, however strong, could keep them within the limits their conqueror set for them. They had neither attacking nor defensive weapons and were ignorant of discipline. The Romans had the best arms the government could furnish and their morale was kept up by approved rules and brilliant tactics. Their helmets were bright and clean, their cuirasses were pictures of art and heavily woven in colors, their shields of rough bull's hide within, plated without, boldly swelling out in the center, reaching a point where darts and spears were harmless. Homer describes Achilles at home polishing his splendid armor for battle.

History describes the earliest migrations from the East as towards the Northwest, from the tablelands around the Caspian. These people were called Aryans, who must have carried their weapons common to that country with them. It is a principle well established that no instrument of war is laid aside till a better one is substituted. The Caledonians in time exchanged their clubs for the arms of the Roman. The Goths, as we shall see, learned their weapons from the Greeks and not the Greeks from them. Our own aboriginal tribes threw away the tomahawk when a fowling piece was accessible. Tribes may go out and be lost, nations be absorbed and assimilated with their conquering brethren, but the last tie that holds decrepit nations is their arms. On this plea the early migratory tribes seemed to show little that distinguished the character of their ancestors in their old home in central Asia. Scholars see some peculiarities of the Sanscrit tongue in Celtic forms of speech which represent Tiu, the power of the sky, or Zeus of the Greeks, and which is further expanded to Tuesday, and Thor to Thursday. But the nations as Cæsar found them were little better than naked savages; as they fought with the invaders they seemed to rely entirely for their success in their ability to throw large and unwieldly masses of limbs or muscle without order or discipline or protective arms against the skilled veterans of the Empire. Their rapid overthrow was inevitable. Had the combatants been equally armed and trained they would have fought as "Greek meets Greek." In their homeland before their migrations their contests were less unequal, but their arms were much the same and each one supplied himself with the very best weapons he could afford. Often they engaged in battle to test the weapons of their adversary. The first man killed gave up his weapon and his adversary secured it. If its material or workmanship attracted his attention he retained it. If not, he threw it away, and there you may believe, it did not long await a claimant. The flying clouds of Cossacks of whatever name or race, the vultures that feed and fatten on the spoils of an army, devour or appropriate everything and destroy what they cannot use.

The weapons of the early Britons were spears and battle axes and clubs. They had neither bucklers nor shields, but neither the Romans nor the Teutonic invaders whom they resisted could drive them entirely from Britain. They sought refuge in Wales and Cornwall or the Highlands of Scotland, where they have remained almost to the present day. There have been two countries in the world which have furnished vast swarms of Barbarians, who have left their native homes in the North for the softer skies of the South, and have crossed the line of invasion we have mentioned from the Northwest to the Southeast, the Scythians eastward of the Black Sea and the Germans to the west and northwest. Germany is a land of woods. More than two-thirds of it was anciently covered with forest. The Wester and Hartz mountains give way to the great Thuringian Chain, running from northwest to southeast. This forest was then a park of wild animals. In Cæsar's time there roamed the wild bull; bears and deer were frequent, and the elk had not as later followed the reindeer to the North. The rivers were a marvel. Within a circle whose radius would not exceed fifty miles three great rivers rise and pass to different parts of the Empire. Two of them connect, and a third only separated by the distance from Lake Constance to Geneva. By these a trader could reach the North Sea, the Western Mediterranean at the Gulf of Lyons and the Eastern at the Hellespont. Up the Rhine and down the Rhone, was a common expression of traders one with another. The Phoenicians in an early day transported amber from the Baltic overland to the Danube, and both the Rhine and Danube were in constant use by the conquering Romans who had their legions to guard the passes and the frontiers. Nothing was known of the Germans till the time of Cæsar. Then, as if their roving nature suddenly possessed them, there broke forth from the woods and morasses a swarm of adventurers more furious and persistent than sprang from the caverns of the Trojan horse. They were nomads and a nation of hunters. Did they not worship Woden or the mighty Thor, which thundered as Zeus in the lands from which came their ancestors till he sent them forth beyond seas to found a home in the West? Now, the Elbe and the Vistula were as sacred as Ida or Parnassus. Tinged and fed with this romance, they sought the warmer climes of the South. They rushed to the rivers and seemed determined to cross, but they had no boats and no knowledge of building them. They had little or no iron, for its use was not needed save to point their spears. Some of them may have swam across, but many of them had their wives and children, which they transported only when winter came, making a highway of ice. The Angles, the Saxons and the Jutes passed into Britain, while the Goths and the Vandals found a home across the Rhine in Gaul or Spain, or they descended the Danube and in present Hungary founded them a kingdom which was not to cease till the destruction of Rome. An association of different tribes succeeded, which called themselves Franks, and they drove out of Gaul the newcomers, or incorporated them with them and established a government forming the present nation of France. These with the Huns from the east and north of the Chinese wall were the main tribes that attacked the Roman Empire east and west, from Cæsar's time till 476, when the Empire fell, and these were called Barbarians. As Gaul was a dependency of Rome since its conquest by Cæsar and remained faithful till the decline of the Empire in the Fifth century, the tribes that invaded that country were as much enemies of Rome in that period as though they were encamped on the Rhine or the Danube, but in 410 Rome abandoned Britain, and in 448 withdrew her last army and advised the Franks to take care of themselves, as Alaric the Goth was already at their gates. Twice the Goth overran Rome and sacked it till in 552 the Gothic kingdom was destroyed by Justinian. The Huns were totally overthrown at Chalons in France a hundred years earlier, and the Vandals, after taking Rome once, were dispersed and lost in Africa after the fall of Carthage, and passed out of history one hundred years before the Saracen invasion in the seventh century. Clovis, the Frank, united the scattered tribes in a strong confederacy which sent tribute to Rome, which continued to claim a nominal sovereignty.

It is somewhat remarkable that the savage tribes here mentioned spread over a country a distance of two thousand miles, constantly in a state of warfare and governed by leaders whose skill was often a match for the most cultivated races, found nothing to invent or increase the efficiency of the arms they carried. They simply fell into the use of the very weapons of the people they overthrew. What they did not have they learned to imitate, and by giving greater vigor, as the Romans lost it, they overmatched the genius which the latter possessed. They were slaves to the Roman arms, and so pleased were they to obtain them that they forgot their own interests in their haste to adopt them.

Bows were on the whole the most useful weapon for all nations, but the more cultivated people early used them the least. The Franks in course of time improved them to cross bows, but they were not actually a new weapon. The countries on both sides of the Alps armed their soldiers with swords and spears, and I apprehend that if a gun of much greater destructive effects had been invented the majority of soldiers would have held to the old weapon, inasmuch as their personal bravery shone more conspicuous in the simpler arms. The remaining nations which made incursions into Southern Europe and Western Asia were the Scythians, Sarmathians and Mongols. When the Greeks first extended their trade north of the Black Sea in the 7th century B. C., they found a very wide extended nation whom they called Scythians or Scolots. They extended west into Europe, where they were called European Scythians. Beyond them east were the Sarmathians, somewhat of the same characteristics, and lastly the Asiatic Scythians or Mongols, who occupied the highlands along the Russian Steppes.

They occupied also for their dominions from early ages the plains of Tartary, reaching unto and sometimes into Western China. The Scythians were masters of a large part of Northern Europe, long before the settlements of Greece and Rome. They were a pastoral people with flocks and herds, living in tents, moving about from place to place with their wives and children. Before Cæsar's time they seemed to have lost their name and place, either from being incorporated with other nations or being overthrown by them. They were in the track of migrations from East to West, and as the Huns ran across only the Alani in their march to Europe, they may have withdrawn farther North, where they occupied lands under another name and out of reach of the wandering tribes. They may have been related to the Avars, from the river Var, whom the Turks dislodged about 545 A. D. Certain it is the Huns found no Scythians on their way to Europe and the Danube, where the remnant that was not cut to pieces by the Turks finally landed.

The Sarmathians were a limited people, east and west of the Don and north of the Caucasus, while their larger neighbors spread from the Vistula to the Volga. The Sarmathians had little iron and in their emergency they invented a sort of cuirass formed of horses hoofs, which resisted the sword and the javelin. These hoofs they cut up into thin slices overlapping each other like scales, and strongly sown on coarse linen. The quivers of their bows were filled with arrows pointed with fish bones dipped in poison. They fought on horseback with bows and arrows as well as spears, but they made no lasting impression on the lands of the South to permanently occupy them—neither they nor their Scythian neighbors, but were like the Bedouins of the plains, at home anywhere when night falls. The Scythians were always distinguished by their bows and from being a Tartar tribe were sometimes called Tartars from the extreme length of that weapon. It was often of the length of six feet and their arrows were proportional. All the country east to China and even China itself affected these large bows, and the Chinamen styled their invaders from this country as "great bowmen."

With this statement we might stop and declare that offensive weapons seem to end where they began, at the bow. Neither the wild tribes of the woods nor the plains, neither the cultivated Greeks nor the Romans seem to have invented, or have in process of invention, anything which did or would give promise of radical change in the weapons of war. So certain were the ruling nations that this weapon would not be superseded that they ceased to look farther for anything new or novel, and they regarded further invention as unlikely or impossible. Nothing seemed likely to drive out the bow. In the Scottish wars the English army of cavalry and archers was matched against Scottish spearmen and easily won. At the time of Edward III of England, archers had become the mainstay of the army. They formed the complement thereof, either in front or rear; in infantry or cavalry the bows supported the wings. Their range was remarkable. An English archer is known to have discharged his weapon at a distance of six hundred yards with precision and effect, and three hundred yards was considered no unusual achievement by many skilled archers. In the time of Elizabeth taxes were paid in part by bows and arrows or the material to make them, and although gunpowder had been invented and siege guns were coming into use, half of the cost of expensive armaments was charged to bows. Henry V had twenty-four thousand archers and Edward III ten thousand archers in his war against Philip of France, who nevertheless had five thousand cross-bowmen. Nor was the bow wholly given up until within the space of one hundred years past. What sport the English hunter had with it is chronicled in the many valuable lives that paid the penalty of their folly. William Rufus, King of England, was killed in New Forest while hunting in the year 1100 by his companion, whose arrow, discharged at a buck, glanced from a tree, and who, seeing the desperate plight he was in, hastened with all possible speed to the seashore and, finding a vessel, embarked for Palestine, went thither and flung his life away in battle with the Turk. John, the greatest of the Comnenian Princes of Constantinople, was killed by an arrow which fell from his quiver while hunting wild boar in the Valley of Arizarbus. Richard, an elder brother of William Rufus, was also killed in the New Forest, as was his nephew, Richard, and Richard Cœur de Leon, who had come home safe from the Crusades, was killed at Chalons with an arrow. The American Indian, with his prodigious strength and towering muscles, made the bow a terror to the white man. It is related of Powhattan that he drew a bow of such great length and with such masterly vigor that he sent the arrow clean through the body of a deer and fatally wounded his mate that stood beside him.

The splendor, the renown and the decline of the Roman empire are among the conspicuous facts of history. So extensive and so complete did the former appear to be that when its boundaries were pushed out farther and farther by able generals and not unwilling emperors it was beginning to suffer from internal decay. In Cæsar's time the Emperor, as he was the head, was supposed to accompany the army, but with the exception of Trajan and Aurelian, and still later Julian, after Octavian's death that custom was not generally practiced. By that means the army in distant provinces was more effectually cut off from the direction and support of the Senate, which in its early history was the ruling body. In time the arms which built up the Empire, in the hands of unpatriotic and mercenary leaders, contributed to its overthrow. The Generals received and distributed the prizes of war and levied and frequently retained the necessary tribute where their armies were encamped. From the time that Cæsar crossed the Rubicon the army, while not obedient to law, enforced what they were pleased to call their own laws. The government from being republican became despotic. Augustus or Octavian died in the year 14 A. D. and the feeble emperors that followed for forty years added no lasting glory and preserved none which they had inherited. Succeeding them, however, Trajan, Hadrian and the two Antonines so supported and emphasized the teachings of Augustus that the name of Roman lost all its former obloquy, and by general consent this period became the happiest of Roman greatness. By the testimony of Augustus, he warmly advised his people not to seek to increase their limits by conquest of further territory, declaring that the limits of the Rhine, the Danube and the Ocean in the West, and the Euphrates in the East, were the extent of the dominions which they could hope to hold safely, and advising them that in the administration of those distant lands there was an open field for diplomacy which could accomplish more than arms. With two exceptions in the next two or three hundred years this advice was pretty closely followed. Julius Cæsar, while he had overrun Britain, had not conquered it as he had conquered Gaul. This was afterward effected under succeeding Emperors—by Agricola, under whose direction those great walls were built between the north and the south parts of the Island in that narrow space a little north of Edinburgh in Galway where the Firths unite to form an isthmus of about forty miles. Besides this the army made one expedition across the lower Danube by which Dacia was added to the Empire, the only Roman province beyond that great river. The banks of the Euphrates were carefully guarded by Trajan and Aurelian, and before the fall of the Western Empire by the Emperor Julian, who lost his life by a javelin in his attempted retreat from the dominions of Persia. The Parthians were the only enemies that contended successfully with the Roman arms in that distant region until the Northern hordes came down from Scythia and under different names possessed themselves of the great plain of Asia Minor, or drifted onward, a great propelling wave into Europe, through Thrace and Dalmatia in Northern Greece, now Roman land, beyond the Danube into the confines of Hungary. The Persian Sapors died, having spent most of their time in wars, either for the capture or recovery of Armenia, which lay between them and the Roman lands, and whose people were always Romans and who were included in most treaties which the Persians made with the Romans. While Armenia remained under the protection of the Empire it ably defended it against the constant inroads of the barbarians, who broke through the defiles of the Caucasus on their march to the West. The Romans set up the Kings of Armenia, and so well and favorably known were the people of this province that Chosroes, the Persian, fled from his own nation to the Romans, who protected his minority and gave him Roman culture. When in a stress of misfortune at the farther East the Roman general withdrew his protection for awhile, the barbarians broke through the narrow passes of the Caspian and were so troublesome to them and the Persians that the two empires mutually built and guarded a long line of fortifications, which ran from Colchis, at the mouth of the Phasis, on the Euxine, to the plains above. Treaties with the Persians were always made to be broken according to the necessities or abilities of the combatants, and this intercepting line was violated by the Persians one hundred and fifty years after the Western Empire was overthrown, but in this ferment, which preceded the fall, articles of luxury flowed in copious streams by way of caravan, which ran through to the open ports. The Romans in enjoying their wealth forgot or neglected the avenues through which their progenitors had made it. As dissipation increased the flood gates of expenditures remained open. The merchant galleys were busy in transporting articles of jewelry and feminine adornments and the evanescent odors of India or the Isle of Cathay. The spices of Ceylon and Malibar; the pearls and carbuncles of India and the silks which the looms of Nankin manufactured, became most conspicuous as merchandise or dearest article of female attire then known.

Every six months, ships starting out from the Red Sea and running along the mainland to the Persian Gulf at length reached Ceylon, where Chinese merchants met them and sold their wares. When the Persian wars did not interfere the caravans met the ships returning home and took its usual route up the Tigris or the Euphrates by the ruins of Babylon on to the north of Palmyra, where it joined the mountains and skirting around it went westward in the Syrian Desert on to Damascus and the Mediterranean shores of Phœnecia and ultimately to the three great distributing centers of Alexandria, Constantinople and Rome. The Persians also competed for the trade and when the route was blocked through the desert, they took north of the Caspian and then around to the Black Sea or the Euxine, reaching Constantinople that way. There was also a farther Eastern route, which the Persians could use and that was by way of Kansuh, the northwestern corner of China, a direct route from Pekin, south of the Great Wall, where there was always an open port. The great difficulty was in crossing the mountains and the possibility of meeting hostile tribes. There was no tribute in passing through the Hellespont and the route to Alexandria was sometimes changed to cross the Isthmus, when there was a canal. When the fleets landed farther south in a port of Arabia, the goods were transported to Yemen, on the Eastern side of the Sand Desert and when the traffic from Abyssinia was unimpeded, it followed across the country to the Nile, whence it descended the River to the City. Whatever way it came, when once the gates were open they were not easily closed and it is fortunate we believe that other classes of merchandise than articles of luxury found passage into Syria. Chinese pyrotechnics may have been an article of luxury and flowed in like any foreign commerce finding a channel already prepared. Who transported or delivered the goods we do not know. But if the Chinese prepared them they were certainly able to transport them, and when once delivered they fell into hands, either ignorant of their use or zealously determined not to barter them away on an open market. We will see how far the East was indebted to the Chinese for Greek Fire.

Beyond the Eastern boundaries of the Roman Empire and thence forth reaching to the Yellow Sea and the Ocean was the great Chinese Empire. Its history, strange though it be, antedates all human record. It became a hermit nation solely for its own defense, always persistently devoted to industries, which require patient thought and minute investigation, they have from time immemorial prosecuted scientific inquiries. Long before the Babylonians read the stars, they had made charts of the heavens. They discovered the art of printing on movable blocks or types long before the Europeans. They discovered silk worms and the mode of propagating them and had woven their tiny webs into the most costly articles which found a market in the marts of their enterprising neighbors. When this commerce was interrupted by the transplanting of the eggs into Persia by two monks who carried them away in a wooden tube or pencil, they applied themselves with renewed zeal in the manufacture of silk garments or vests, which became objects of barter and exchange, and which were frequently mentioned as the spoils of subject nations in their foreign wars. With such habits of acquiring and unburdened with the vice of spending they became, like the Jews, kings of finance within their commercial limits, and while the Greeks were exploring the estuaries of the

Euxine, founding new cities and planting colonies here and there, and the Phœnicians were trading in the products of the mines and fields and in traffic along the Mediterranean, and opening up great routes of travel, they modestly secured the prizes of manufacture in constructing inexpensive and easily preserved articles of traffic and disposing of them through first hands and in exchange for coin. They rarely passed beyond the limits of their own country except in occasional wars, disposing largely of their goods in their capital city and the outskirts of the provinces which had a trade with western nations. They were skilful engineers and physicians and worked with considerable skill mines of gold and silver. "Their skill as craftsmen," says a Franciscan friar, "in every art requiring minute research, was equaled by few and excelled by none." Their heaviest burden was the inroads which their neighboring nations made upon them from the north and west, and in the long run they suffered more from foreign invasion than they were able to repay.

From the few scattering notices obtainable, it appears that the Greek Fire originated in China and found its outlet through the then known channels of trade, the caravans. Though historians differ and the ablest of them all cautions his readers to suspect his ignorance from the slight evidence obtainable, both of the country of its origin and its early composition, the doubt is the weakest which couples its appearance in Asia Minor the early part of the Third Century. From that time forward several instances are on record of an artificial fire which was employed by besiegers or besieged in the investment of a city. Sometimes it is hard to distinguish between the mechanical engines and the material because every besieging army carried trains of these engines and battering rams, and they threw red hot balls of stone or iron which were easily mistaken for foreign fire. Somebody delivered the goods into Syria as they there first appeared, and before the final rupture of Rome with internal hemorrhage. Later we shall see by whom the discovery was claimed, but the following instances show its origin long before the siege of Constantinople. In the year 270 A. D. Zenobia and Odaenathus disputed the sovereignty of Rome over Palmyra, a city of the Syrian desert and on one of the trade routes between the East and the West. Aurelian was Emperor and he proceeded against her, and after reducing her to submission he departed home. When nearing the straits which connect Europe and Asia he was overtaken by a courier who informed him that she had again rebelled, and, returning at once, he overthrew her army, destroyed the city and took her in chains to Rome to grace his triumph. "The Roman people," says he, "speak with contempt of a war I am waging with a woman. It is impossible to enumerate her warlike preparations of stones and arrows and every species of missile weapons. From every part of the walls artificial fires are thrown from her military engines." We cannot say what that artificial fire was, but at least it was suggestive of being, and it clearly was, the nucleus of that great discovery which five centuries later arrested the march of the victorious Prophet of Arabia. In 546, after the fall, Rome was attacked by an army of Goths led by Totila and captured in spite of the defense of a floating castle which contained a magazine of fire, sulphur and bitumen. As these were the main ingredients of Greek Fire, it seems hardly safe to claim that the discovery came to the knowledge of the Romans nearly two hundred years later. Possibly it might have remained a secret possession of the government had that remained in Italy, but its glory had fallen and the Empire had been transported to the City of the Straits. Coming still nearer the siege of Constantinople we may remember that Heraclius invaded Persia for the purpose of calling off the army with which Chosroes had laid siege to the city. Heraclius suddenly attacked in the winter season the walls of Salban in Media and razed them to the ground with the aid of darts and torches. These torches were not merely combustibles of flax wound round the point of a dart, but their destructive nature arose from the composition in which they were dipped and which once set on fire could not be put out, and the historian distinctly says "the city was saved by fire and mechanics." The fire was doubtless some form of Greek or Chinese combustible which later saved Constantinople, but had no great potency as an attacking weapon till it was later improved and became an explosive.

It is generally believed, and often stated, that this trade between the West and the East by caravan was not large during the decline of the Empire. Nevertheless it continued of very fair proportion, in connection with Alexandria, which derived almost its entire profits from foreign commerce. Ptolemy Philadelphus reopened the canal of the Red Sea, established a desert route for the caravans, sent ambassadors to India, and enlarged the trade with it and Ethiopia, or Abyssinia, which continued for eighteen centuries beginning with 266 B. C. The Romans were very careful not to obstruct any commerce, the fruits of which they enjoyed or which ultimately would be of interest to them. The state of Egypt at the time of Cleopatra illustrates the fact that Rome was steeped in the luxuries which she was fain to enjoy and only foreign countries could furnish. At the time of the death of her father, Ptolemy Auletes, she became ruler under the Romans in connection with a younger brother whom the laws compelled her to marry. He was but a youth and she pined to be free from her boy husband, and with the entire authority of the government to espouse Antony, who as one of the Roman Triumvirs, was looking after his interests in Asia Minor. Octavian had instructed Antony to call Cleopatra to trial for usurping the throne and putting her brother to death. The queen did not wait for Antony's tribunal, but set off with a costly galley with sails of silk and purple, and reclining on an improvised throne scented with the odors of Ceylon, with strains of music and the artful coquetry of lights and shadows which betrayed her royal dress and luxuriant form, over which the eunuchs bended in silent admiration, she sailed up the Cydnus in Cilicia and bore Antony off to Egypt, a slave and not a judge, leaving his kingdom to the peril of being lost to the Roman arms. There with the use of all the arts of a profligate woman she detained him for several years, until Octavian, becoming weary of having his authority thrown into disrespect, made war upon him, and in the battle of Actium in the Adriatic, where Cleopatra furnished part of the ships, Cæsar overthrew him. Cleopatra, hasting away to Egypt, killed herself on report of Antony's death, which Antony seconded by doing likewise. She gave as her only testament to the Roman people three children to Antony as she had before given to Cæsar a son. With her expired the last of the Ptolemies, the sixth in order and the most profligate of them all.

If we will examine carefully what kinds of merchandise the traffic was made up of which came into the ports of Rome and Alexandria we should be able to compute how much virtue was left to the, Romans before the Fall. These articles were silks, jewels, perfumes, pearls, precious unguents, slaves and slave girls, with salt and sulphur and in the Syrian desert at Palmyra where the caravans were not long in their route from East to West, was to be seen bales of purple wool, Grecian bronzes as ornaments for the temples, and incense, the olive oil of Palestine, with hides from Arabia, which lined along the public buildings on the backs of asses or camels made a show of Eastern pomp and elegance which strangely contrasted with the movings sands of the desert. Pliny computes the value of the wares which became articles of luxury as introduced into Rome as not less than three quarters of a million yearly. Silk was the most expensive of all the articles of dress. It was estimated that it was then in the second or third century worth a hundred dollars a pound in the Capitol. Pearls and diamonds stood highest among precious stones, and aromatics were used extensively in their pagan worship for the temples. The Senate at this time complained that in the purchase of female ornaments the wealth of the State flowed to foregn nations. The annual loss from this source is computed at eight hundred thousand pounds sterling. When we consider the amount that constantly flowed in from the Provinces as tribute, the rich mines of Spain and the revenues from conquered cities, it does not seem at all disproportionate as long as the rulers were possessed of the principles of public virtue, but it is commonly remarked that those suddenly raised to affluence are the least worthy to receive it, while those born to fortune, if they pass the early years with safety, can endure the homage of luxury without unworthy ostentation. The heritage of ancestors in jewels and unserviceable bric-a-brac and heirlooms seldom reach the open market, when once they have been valued as keep-sakes. Luxury twines like a parasite round a healthy tree; it is modest, living in seclusion under the protecting leaves of the giant oak, which supports it from publicity, but the ruder sort is ambitious, it is vulgar and clambers up with apparent grace a trunk dead at its top; without a crown; without a leaf and living on the dead past bestows a wealth of leaves and shade, which covers its naked defects till it falls.

The latter kind seems to represent the wealthy Romans as they were in the latter days of the Empire. As the woman with many lovers is false to them all, so the worship of many gods and goddesses, however refined, is fatal to any belief. The woods and groves and later the temples corrupted the morals without informing the faculties. The virtues that have no active enforcement by mental training sink to a common level and that is low and debasing. The commune of France is impossible anywhere, because the man of ten talents is not satisfied with the pay of five. Frederick the Great found it an ungrateful task to raise an army of six-footers, because the culling out process must take off the heads of the tallest or stretch the necks of the shortest. There are but two places in the world where a level is always forming, the ocean and the desert, and these two have never found a habitation for man. The wages of sin is death; the wages of poverty is silence. No living thing flies or flees or swims in the waters of the Dead Sea and impure things and bacilli swarm in foul and stagnant waters. In the Roman world love had become lust. No woman of beauty, of chastity, who valued herself, dared to show herself uncovered in the presence of the Emperors. The debaucheries of the Court before the fall were of the same disgraceful character as those of Theodora, wife of Justinian, after. Seductions were rampant, lewdness grew to be constitutional.

The fetters of unseemly passions held the people till long after mid-summer prime had passed away, when Nature is sombre, its appeals luke-warm and its responses indifferent. The wife of an emperor mourned like Alexander, because the parsimony of Nature abridged her gallantries. The voluptuousness and sensuous models of Egypt were transplanted into Italy after Cleopatra had passed one winter season with the Cæsar at Rome. The Eunuchs presented new inducements to gratify the tastes of their masters, because they were in condition to be trusted themselves without betraying others.

The Greek fire as a combustible came into the notice of the Eastern world, as we believe, while this depravity was centralizing about Rome. Somebody in the Provinces gave it or sold it to Zenobia, who was wise enough to know its worth and to keep it as profoundly secret as did the Greeks, when once they knew what is was.

The description of this combustible as it appeared at the Seige of Constantinople has been well described by a French critic, who writes—"It was like a winged long tail dragon, about the thickness of a hogshead, with a report of thunder and the velocity of lightning, which dispelled the darkness by its illumination. It was discharged upon the enemy by various engines of war, or in smaller quantities attached to arrows or darts" Aside from its terrible appearance it concerns us most to know what was the propelling force, whether of outside agency alone or in part, and whether it was wholly a combustible. We are inclined to view it only as the latter, at least in its earliest stages and during this siege, and while it is conceded that it was composed of a mixture of Median oil or petroleum and sulphur, and the pitch from evergreen firs was added to conceal more thoroughly its ingredients, saltpeter was afterwards added, when it became an explosive. It is known that rockets were employed at a very early period in India and later by Leo at the time of the siege. The composition may have been enclosed in hollow globes of iron and discharged like a hand grenade from the walls, in which case it would not have been of the immense size that was sometimes noted. There is one instance, and only one, wherein the retraction of twisted cords is given as the motive power. Now the fact that this substance was often vomited forth from the mouths of copper tubes fastened on the prows of ships, confirms the belief that the propulsive force was the same as that used by the machine guns against a besieged city. This was hand power of some sort, aided by mechanical contrivance, and made so strong as to readily shake and batter the walls. Joinville, who was an eye witness of the siege, says it was thrown from a petrary, which was a device for hurling stones and rocks. It is not to be supposed in the first instance of its use that it would show the same or equal effects that were obtained afterward, but its chance of improvement was slow so long as it was known to be confined to one city without the aid of inventors from without to add or exhibit its terrible effects.

But the materials of manufacture were common in many Eastern cities. Petroleum was a product which under one name or another was known to all the inhabitants of the Mediterranean, as well as the Euphrates. It was carried on the backs of camels from city to city. It was known to the Scythian country, to Arabia, as well as to China and India. The terror Greek fire inspired in its composition was out of all proportion to its effect, but it produced fear and fear is destructive of the morals of any army. It could be put out only with sand, earth or vinegar. Water merely quickened and increased its danger. When thrown over the walls of a city, it immediately attached itself to some loose object, when the people fled and the city fell. No time was necessary to make it a blazing caldron. The patient and minute industry of the Chinese in the combination of the two materials, petroleum and sulphur, was added to by distant nations who became possessed of the knowledge of its wonderful effects as an agent in their wars. By the means of the charred embers of wood fire, acting on the nitre already in the soil, a further compound would be formed, using the same materials as afterward entered into gunpowder. Tourists and travelers for sport might at any time kindle a fire while camping over night by which the materials would be brought together and an explosion would be the result. Such result actually followed, it is believed not from the Chinese, who were proficient in the ruder forms of artificial fire, but who for a thousand years always asserted that they knew nothing of its application as gunpowder to the arts of war, and indeed the knowledge slumbered everywhere till about the fourteenth century. The Chinese claimed the accidental discovery of fire by the fricton of two pieces of dry wood. In 284 A. D. Theodosius, the Roman Emperor, sent ambassadors to China, and the Persians for a long time, as well as the Romans, in the third century, were so well acquainted with the China trade and with war between them, the traffic was constantly flowing into other countries from Kansuh in the Northwest. After the trade was restricted by constant wars of the Persians, it was extended more fully along the sandy deserts of Arabia, and later by water transportation when the Arabs began to plunder caravans which got through by Mecca and Medina. The most we can say then is that the Chinese originated or employed the materials which formed the combustible while other nations outside added saltpeter, when the explosive nature came into notice. This becomes more probable from the fact that while the original of the Chinese ingredients placed together, when once exposed to the air takes fire, the addition of saltpeter makes an explosive. Then to get its full effect, it became necessary to control and centralize the ingredients in such a way that the combustion must take effect in time and place as suited the operator, or else the operator must be destroyed by his own petard.

Whether this hollow tube was suggested by Pan playing on his pipe or flute, or the known fashion of some tribes that with the use of a reed as a blow gun, was discharged poisonous weapons, or from the knowledge of circulatory and digestive processes, or the warlike method of discharging missiles by means of tubes over the walls of a besieged city, does not appear certain, but it was not done to any extent before the fourteenth century, as the closed tube did not appear till that time in its use for the purposes of artillery. Up to that time, some six centuries elapsed with no important improvement in the use or efficiency of military arms, only two additional implements of war had been added by the Romans from the beginning of their history, one of which was the iron mace or battle ax in the West and the lance in the East. War would naturally create weapons of war, and this it did in number by a greatly increased ratio everywhere the Roman government held its armies. The forges of the great cities of Gaul and Syria were working night and day in bringing out increased numbers of weapons of the size or character the smiths could handle. It is said there were twenty-seven factories in these two provinces alone after Clovis had begun his work of cutting to pieces, forming anew and consolidating the remnants of three nations of barbarians in Gaul. In Constantinople from the time of its foundation, immense preparations were constantly in vogue for supplying swords and spears and bucklers for the army in constant struggle in the East with Persia or in defending the City from the attacks of mercenary tribes, which at any moment and without warning congregated in battle array around the walls. Every battle left a confused mass of broken armor, too good not to be stolen and too poor to repair. The vices of savages are always built upon the weakness of their adversary, real or supposed, and whenever a legion showed signs of giving way as the Romans often did, when they reached the outer circle of their conquests, east or west on the Euphrates or the

Rhine, the slaughter of men and weapons was something teriffic. When Crassus was defeated by the Parthians about the first century, the shame at the loss of their standards so played upon the mind of Augustus, that he made an unusual effort to regain them by going there himself, a thing which he seldom did and recovered them at a great sacrifice.

So far as the Barbarians are concerned, who made war upon the Roman dominions, we have seen that up to the time of the decline and fall, they had brought to light no new or important discovery, which would lighten the horror or shorten the conflict of arms. The Roman world seemed apathetic, while it was slowly sinking, where courage could no longer compel victory. The Romans were not inventors, but simply conquerors, and when the Roman youth by the softness of their manners corrupted by wealth and with weak and flaccid muscles refused to handle the weapons, with which their ancestors achieved the great conquests from Britain to the Euphrates, and left the long line of outposts which ran from the Rhine to the Danubeand the Euxine open to the Barbarians, and only slaves and captives to guard the road to the Capital, there was no longer any force which could break the fall or hold the Empire together. If some Callinichus had then come to their rescue, with the discovery, which it is claimed he delivered to the Greeks two centuries later at Constantinople, the Roman might have rolled back the tide which set in from the north and east, driven the Barbarians to the mountains and maintained the supremacy, which it had gained, not only in war, but in all the arts which adorn and beautify the life of a nation. Gibbon has said that no new arm had appeared from the time of Thucydides, five hundred years before the Christion year; it might be said with truth none had appeared till Constantinople was invested by the Turks in the Seventh Century. Practically the number and nature of the arms they used were few and limited. In Alexander's time the pike and sword and battle-axe and bow, not counting slings, were the sole outfit. The pike was very long, of sixteen feet, which was after his conquest found to be so cumbrous and unmanageable, it was reduced to twelve feet. The eastern nations, into whose provinces Alexander transported his army, were all bowmen. As a general rule the Eastern nations in contra distinction from the West, have always considered the bow as their most effective weapon. All the nations that dwelt in Scythia north and east of the Black Sea to the confines of Finland and Siberia, now under one name and now under another, stretching over those vast plains which Russia holds for thousands of miles to the Arctic ocean, always made special and effective use of the bow. As these countries embraced the tribes which made inroads into the Roman provinces, always going south, seeking warmer and more fertile climes for their families and flocks, while the cultivated peoples, that lived in or near the promontories that jut out into the Mediterranean never carried their commerce beyond the table land of Russia or steppes of Tartary, we may believe the bow originated in that quarter contiguous to the Caspian. At all events the Tartar bow was always meant and dreaded by the Romans when they compared their own arms with those of the peoples beyond the Caucausus, the Caspian, the mountains of Armenia, the Oxus and the Jaxartes. In ages long past before history can make determinate limits, the bow was the main weapon employed in attack or defense in Assyria and Babylon, where originated the progenitors of mankind. But it was of little use in the hands of feeble or effeminate peoples like the Romans, such as they became in their decay. Under different names the same weapon is often meant as in the case of the pike, which becomes a spear or lance. The sword in Scottish annals becomes a falchion, with the Turks a címeter and the form and shape assume different styles to suit the fancy or caprice of the nation that adopts it. The fact that the purpose or the effect of the weapon was unchanged is indubitable proof that the Romans had lost the enterprise and elasticity of their ancestors without genius to discover their weakness or thrift to repair their mistakes before the inevitable fall, which sooner or later must come or some fortunate Syrian unknown to fame reaps the benefit of an inestimable discovery.

From what we have been able to gain of scattered notices from different writers, we should place the discovery of Greek or Chinese fire as it was then understood from the middle to the end of the third century. This is not entirely agreeable to some writers, but when we consider the proofs which lead to this belief and the fact that the disagreement may arise more from the looseness and ambiguity of words which are the weapons and not the argument itself, we may find our conclusions are reconcilable. We have already given several instances where a mixture of petroleum and sulphur was used. Once against the Goths in Italy, once in Persia, at the walls of Salban, and one more important and specific instance, at the Siege of Palmyra, wherein Aurelian was the Roman general and emperor and Zenobia was the Queen of that city.

She was eventually subdued and taken to Rome to grace the triumph of her captor. It is now upwards of fifty years since we first read the story of the Palmyrean Queen and our conception of her character has not been very much dimmed or altered in that long interval. To us it is a most melancholy story from the time Aurelian engaged her armies in Antioch and Emesa, till he had broken her power, trampled upon her successful and brilliant administration and, fastened with a golden chain to his chariot, offered her to the dust and contempt of Rome. But it is not in sympathy with her fallen power alone that we make issue, for she was honorably saved from death, given a villa at Tivoli, twenty miles from the city, and for many generations her name with all the honors acquired was perpetuated unbroken to a long line of posterity.

Where were all the great generals who plodded along the highways from Tyre and Antioch and Babylon and the Persian Gulf, with their immense armies to be destroyed sooner or later by Sapor and the Chosroes, that this little secret was overlooked and the bold, sprightly, energetic and withal beautiful woman was able to secure and control and flaunt it in the face of the Roman legions? The secret she knew how to acquire and maintain would have been of more worth to the Roman world than all the armies that passed the straits of Europe and Asia. How she acquired this knowledge we are unable to determine but as the Empire extended over all the lands with which she was acquainted, from Rome to the Imperial city of Ctesiphon, the capital of Persia, we think she skillfully and purposely held the knowledge to herself and later imparted it to the Emperors as they treated her with becoming civility in her villa. Let it be remembered she was no settled enemy of Rome, she had repeatedly overthrown Persian armies, which Roman generals and soldiers were only too glad she should do, and had even helped them in reducing and holding Egypt in submission and with the knowledge so acquired and bequeathed to the Romans she was able effectually to prevent Totila, the Goth, from entering the city. Was it not significant that in the three centuries which elapsed between her fall and the attack of the Goth no living person, high or low, held the key which could shut out a foreign army from Rome. We do not believe that the full success of the invention at that time had been reached. We see no evidence of an explosive compound which was afterwards developed and reached the market among the Greeks, but the force of two ingredients was sufficient to save and maintain the fortunes of the city. The fire was there and it could be distributed at any of the frequent sieges artificially with the same force that carried red-hot balls of stone and iron from the military engines, that accompanied every Roman army, but the Goths had no knowledge of its existence. They were a race of hardy, compact and substantial bodies and although they never developed any of the arts themselves they were ambitious to learn, quick to imitate, and of such versatility in mechanical contrivances, they were soon possessed of all the devices of the Romans. They entered the armies of Rome for the one purpose of becoming their equals, and the vices of the growing youth among their rulers contributed so far to their success that they soon knew at some future time, not far distant, new blood must be infused or failure was inevitable and in their place the Goths would become the sovereigns of Italy.

It may as well be remembered also that after the fall of the Western Empire the theory and practice of the arts through mechanical power were cultivated extensively by the emperors at Constantinople and they were only too quick to put into execution any expedient which would tend to vanquish their enemies. It was common report that Syracuse had been saved by the burning glasses of Archimedes and Proclus was said to have destroyed a Gothic fleet in the harbors of Constantinople with sulphur, which it is needless to say was not unaccompanied by some foreign substance, presumably bitumen, as a single substance could have had no positive effect. It is recalled that Septimius Severus, in 201 A. D., while attacking Atra in his eastern expedition, had his siege trains burned up with naphtha, and it is easier to explain the appearance of naptha than that of sulphur as the whole of the provinces of Persia are supplied abundantly with that material, while sulphur has to be imported.

We shall be compelled to go back to China as a first inventor of original Greek fire, because of the nature of the materials and the character of the Chinese justifies that conclusion, they being chemists of greater or lesser originality and accustomed to close and protracted inquiries while the Romans were more mechanical in their nature and could carry out in a better manner what the hermit nation could suggest.

As to the commerce between Syria and China there is no doubt that it was as constant and extensive in the reign of Zenobia as it was in the time of Justinian or Chosroes, two or three centuries later. During this time the manufacture of silk was largely carried on and silk and silk cocoons was a great staple of commerce between the two countries, which foreign merchants purchased in Pekin and manufactured articles of silk were held in great esteem by the Persians and silk vests comprised largely the tributes, which they demanded of the Romans, whenever they were successful in wars with them. This traffic was largely carried on by the Mohometans in their holy wars and by the Persians before the rise of the Saracens. During this time, while Rome was weakened and luxury was rampant, while the Roman nobles were living in affluence, bringing their corn from Africa and their prosperity in various channels was marked either as tribute or as wealth which was confiscated from the nations which they over-threw and while they expected nothing and gained nothing, but what was brought from the provinces by the same channel, by some inscrutable decree they received the blessing of the Chinese discovery, which neither party was able to weigh at its full value till it had revolutionized modern war-fare. The constant wars, which left neither life nor property with the growing luxury was fast threatening the extinction of the human species. It is computed that not over one-third or one-fifth of the inhabitants of Italy and Syria remained, when Rome gave up the struggle for foreign conquest, turned over her authority to the eastern Empire, which after the fall of the City of Rome held only the coast line of the Adriatic under an Exarch of Ravenna and southward running to Campania and Calabria and later to Sicily at the overthrow of the Vandals. The City of Rome fell to the Popes as the rulers of Italy who claimed both temporal and spiritual power, but sometimes they ran away when a foreign army approached and they could not maintain themselves without help. When the Lombards under Alboin had settled in the northern part of Italy and were carrying their arms southward, they seemed determined to overthrow most of Italy and were it not for Pepin of Gaul, who crossed the Alps to their relief, the City of Rome would have fallen. The Goths under Theodoric held the city for sixty years till Narses and Belisarius, fresh from the conquests of Africa, terminated their reign in Italy and the provinces got back the management of their own domestic affairs while the Imperial City held to its former prestige as the center of the great, religious hierarchy, which set up and dethroned at its dictation the kings and princes, who ruled beyond the Alps and calling to their aid armies in defense of their presumed rights when their authority was disputed or the City attacked. Their authority was so great and the name and fame of the city had grown so long under the rule of able emperors that until the year eight-hundred, when the reign of Charlemagne commenced, that the great generals came there to enjoy their triumphs and the emperors to be crowned and travelers from every province continued to come and view the magnificent city which for twelve hundred years had become the museum of Empires effaced, the musical, literary and critical emporium of wealth and fashion and art, the palaces which beauty had honored and of which poets and orators had sung the praises which civic pride had builded and martial valor had defended and a beseeching cry to Heaven had finally saved from the torch of the Barbarians. Rome was abandoned for the City of the Straits, the great Constantinople as yet young and uncrowned.

In trying to discover the origin of Greek fire and its introduction into Syria not only does it appear there was a clear route opened up from China or

India by means of caravans, however infrequent, and however often their route was changed to suit the exigencies of war or conquest, it may have appeared that the trade was not only possible, but very probable in the importation of Greek fire. Now by the system of exclusion it might further appear that this combustible could *not* be produced by any other people. The Roman people had assimilated the Barbarians and in many cases subject peoples and races of neighboring countries had associated with them till they became homogeneous. Inasmuch as they ruled over the entire country from the Euphrates to the Atlantic, and from Egypt to the Baltic at the time in which this discovery in whole or in part was possessed by some Syrian, the probabilities are that if a secret it was most likely the Roman people would have been the first to have purchased or possessed it, their generals were the shrewdest and most progressive individuals the nation could furnish, they would have caught at the opportunity to secure any device that would give success to their arms and undying luster to their own name. In the event of a new discovery of great importance they would have been recalled to Rome immediately and if not granted a triumph, they would have been hailed as the deliverers or the restorers of the Empire, would have been granted the freedom of the city, a heavy increase in pay and would have been entitled to the rank of Cæsar. So much for the character of the Romans as purchasers, but were they producers? Beyond the limited scope of mechanics and exploits in the field and in arms their genius did not seem to run in other or abundant channels. They may have invented the compass. They produced few inventions that required deep thought or profound study. The

Roman nation was conspicuous from Cæsar's time for the study of ways and means to colonize distant countries; to increase modes of travel and to use all the devices of labor which did not depend entirely upon mental training. In their constant wars they invented military engines, wooden turrets, which they either transported across the country or built on the spot as the necessary and special accompaniments of sieges, they sent these moving vans in large numbers, when they expected to attack a walled city, ten being the usual number with a large army. Their catapults and ballistae were of such enormous strength and efficiency, that very few walls could resist them. They could throw stone and iron balls of hundreds of pounds weight, (whatever the power may have been) over the walls into the city and set it on fire. As time passed on and armies in the field engaged less in battle and more in walled towns, they laid aside the pilum, which had been so serviceable in hand to hand contests, and built instead towers leading to the top of the walls with such destructive effect. They threw darts wrapped with tow and fed with oil from them, and they built battering rams headed with iron with such velocity as twenty or fifty men could produce, that scarcely a wall was left without yielding. They established posts for conveying news from city to city and from their remotest possessions to the Capital and their expedition for that age was somewhat remarkable. They could make a distance of one hundred miles in twelve hours by having relays of horses every fifty or sixty miles. The event of a battle gave the officer in charge of important news no excuse of any kind for delay, no expense was to be thought of, and neglect was the worth of his life. They organized their armies on a different basis in later years than when they first encountered the Persians. They met bowmen with bowmen, and cavalry with cavalry, put their bowmen in the front or rear, and the light troops in the center. By this means they could easily and rapidly throw out wings like a crescent, and when the attack was most spirited and the center engaged, draw the horns together, encompass a great mass of combatants and send them to the rear as prisoners. They exchanged the pilum for the lance as the shields, when covered with plates or steel, were impenetrable or at least would not hold the weapon. They reduced their legions from ten thousand men, including auxiliaries, and cavalry to five thousand men with additional cavalry and in the Persian wars seven legions numbered only twenty thousand outside of cavalry. They kept two legions in Britain to defend the walls, which Hadrian and the Antonines had built to keep out the Caledonians, and something in excess of thirty legions in the remaining provinces.

These walls were a terror to the Picts and Scots who were moving southward. Not a man in Britain, neither the earliest inhabitant, the Celts nor the devouring swarms that poured forth from the Rocky passes of present Scotland was able to throw them down, much less to build them. The strongest part of a wall is no better than the weakest, but the savages found neither. What was two legions to protect two hundred miles? And Roman walls were built elsewhere as effective in other provinces of the empire. They strung them along from the Rhine to the Danube. They built them at the passes of Thermopylae, where the three hundred Greeks distinguished themselves in holding back the Persians, running a long line into the mountains of

Thessaly. They built the long wall of Thrace to keep cut the hordes of the Danube and save Constantinople, running it northward parallel to the Euxine and lastly the two separate walls, which ran one for sixty and one for two hundred miles through the Caucasus to shut out the Scythians, and which the Romans and Persians as long as they kept their agreements good, maintained separately for common defense. Barbarians of the cold north needed no walls, but they needed armor and weapons, and they needed a navy, or at least a knowledge of shipbuilding, and they found this knowledge in their intercourse with the Romans. When the Goths first descended from the upper Euxine through the Hellespont in the third century the character of their craft was very remarkable, not only in the size of their vessels, which were capable of holding twelve to fifteen men each, but there was not a nail in their construction, not a rivet nor a bolt, and while they were flat bottomed, against which the pressure of the water was very great, the seams were held tight and the boards fastened with the ligaments or tendons of animals. The Romans soon showed them how to construct vessels that were serviceable enough before long to carry them to Britain or to Africa, and while the Goths were no great artificers at anytime in metals, they had the privilege of supplying themselves from the forges of their masters. As often as the Romans forbid the sale of weapons to them, they relaxed the severity of the laws as their necessities became stringent. The Romans were as anxious to sell as their competitors were anxious to buy. When the Goths besought the privilege of crossing the Danube without arms a few years later, they were allowed to keep them by giving hostages that they would not use them against the Romans. In all things the Romans showed themselves skilled artificers and tacticians without which knowledge their bravery would have been no equal match against their enemies. Vigor and robustness came from the mountains; effeminacy from the plains, and it was only a few years when the Barbarian plunderers learning the habits, acquired the vices of their conquerors and then commenced their decay. When the Franks with the confederate tribes crossed the Rhine and held the country to the Loire and the Seine, and their capital in Paris, they were in the fullness of vigor and easily subdued the Burgundians and Alemanni that dwelt near the present provinces of Alsace and Loraine, but they degenerated early and were no better than the tribes which they overthrew. In the field as in the forum, the moral sense receives the first blow and human rights cannot be maintained when that is obliterated. Clovis in a short reign relaxed into his old ways; his life was short and his reign enfeebled, and he seems to have embraced Christianity in compliance with the earnest wish of his wife, and in answer to a vow, that if he was victorious he would accept the god of Clotilda. Gibbon says, he was a robber, a liar and a murderer, but Macaulay, with more discreetness and perhaps sympathy, says, that "All of the Teutonic invaders, Clovis, Alboin and others, were zealous Christians." Perhaps it was a passion with Gibbon to call all Christian invaders or conquerors evil names, as he elsewhere calls the Normans of the Conquest in England, pirates.

It is a melancholy fact that railers against Christianity have been able to suppress or distort the truth of history as Renan in our day becomes ridiculous digging in the foundations of Tyre and the

"Holy Biblus" to discover some vestige of the "women of the ancient mysteries" and forgetting entirely the women of the Gospel whose loving devotion was so dear to the heart of our Lord. There is a wide gulf between Philip drunk and Philip sober.

We may now fairly conclude that the characteristic traits, the habits and inclinations of the Romans did not lead them to the investigation or discovery of abstract truths, and that while they did not purchase and no Syrian could sell to them a discovery of such practical value, without the fact being either claimed or discussed by at least one party or the other to the outside world, the fact remains that some at least of the ingredients of Greek fire were not to be found westward of the Euxine and the Hellespont, and therefore the discovery must be confined to Eastern nations. Sulphur could be obtained anywhere in Sicily and the volcanic regions, while the oil of Media or bitumen or petroleum was a native production of Persia or Arabia and Tartary with its soil mingled with niter in abundance which was the only ingredient necessary to make the combustion explosive. It may be said, and we do not wish to be misunderstood, that the accidental discovery of the effect of intermingling the three ingredients might have been discovered in the latter country, while the two former, which could be had in the far East as well as in Roman lands, was transported hither in the caravan trade. Neither Syria nor Persia, nor Arabia, nor the lands north or east of the Euphrates have ever made any claim whatever, that they used or had knowledge of any such discovery till they obtained it long after the Greeks had saved the city and the Mosque of St. Sophia not only from barbarians, but from the cruel and relentless war of extermination, which the fanatics of Islam imposed upon their Christian neighbors. What disposition can rationally be made of the tradition, that Callinichus imparted all the knowledge of the discovery when made, or the particulars of the composition of Greek fire will appear later in the siege of Constantinople. In the present view there is nothing that seems to indicate that the Romans as such knew anything of this compound, either by purchase or discovery, till the third century, and as their territory was so extensive and the subject nations very shortly became homogeneous, and as neither themselves nor the barbarians claimed to know anything of the ingredients or the knowledge of its use anywhere, and besides were not skilled as inventors from their nature and habits together with the fact that the materials were not in common use in Europe, so as to be articles of merchandise, we may fairly claim that all these people were excluded from participating in the benefit of a probable discovery. We must further exclude the Turks, the Russians and the Arabs, as they did not appear in history till after the siege of Constantinople when the discovery was a secret of the Eastern Empire, the Imperial City, in contradistinction from Rome.

Constantinople occupies the seat of the ancient Byzantium on the straits, which separate Europe from Asia. As the former city it had a history, which carried it back within one hundred years of the foundation of Rome. The great navigator Byzas, a Greek, who followed the seas and proclaimed himself the son of Neptune, set up his gods and established his authority 656 years before the Christian era. The Bosphorus so called, which flows south from the Euxine or Black Sea for a hundred and twenty miles, till it reaches the Hellespont, broadens from one and a half to three miles before it reaches the Mediterranean during a further progress of sixty miles. How many times the fortunes of the city rose and fell in the contests between Athens and Sparta or Philip of Macedon over the control of the city, we may not determine, but eventually when Greece fell into Roman hands, it seemed to be their joy to destroy everything that was Grecian and Septimius Severus about a hundred and ninety-six A. D., leveled it to the ground, but the Goths taking advantage of the fall to make inroads into Thrace and Asia, the Romans were compelled to restore the city, which continued to grow in strength and importance in spite of wars and proximity of the Goths till the year 328, when Constantine made it the foundation of his Empire, or, as it was called, the New Rome. From Constantine to the fall of the Eastern capital, a period of over eleven hundred years, the city was besieged about twenty times and was taken but thrice. During the era of the Crusades, it was taken by Franks and Venetians and held for fifty-six years, a most disgraceful act for the kingdom of Italy. The Huns attacked it in 450; the Huns and Slavs under Justinian and the Persians and Avars in the reign of Heraclius, but all in vain. It was besieged by Alexius Comnenus in 1081 and finally captured by Mahomet Second in 1453, and has remained in possession of the Turks till the present time. In 626, when the Persians and the Avars attacked the city, we make the first approach to the use of Greek fire, which is going to play such an important part in the safety of the city for the next four hundred years. The fall of the Western Empire and the building up of the Eastern part which remained was of momentous consequence to all of their inhabitants. In the one hundred and fifty years which elapsed in that time, the rivalry between the capital cities was constant and severe. The people of Italy were proud of their history and more proud of their ancestry, as noble families cling to their titles when their wealth is frittered away. But the genius of Rome was expiring with the valor of its arms, militarism was the prophetic stone on which their renown was built. The sons of aliens learned the discipline which the Romans lost and the City of the Straits was to be the last bulwark of the Empire for a thousand years.

The situation of the city was the most admirable that could be conceived. Its strategic importance began to be estimated when it was found that the barbarians from Germany and Scythia following either the Danube or the mountains to the Euxine, threw themselves either on the defenseless coast of Asia Minor or the Plain of Thrace. The city was about fifty miles farther from the Danube than was Rome. The wars with Persia on the East seemed of endless duration. To transport their armies, the Romans had to submit to a largely increased expense by its distance from the metropolis without any special advantages that could be gained for any country but Greece, anl they seemed to be careless for Greece more than for any other province. Moreover the Barbarians after arriving in Thrace found Constantinople too stongly guarded to give them any prospect of capture when they almost universally headed for Rome, whose defenses were less impregnable. The Goths themselves, when once they were permitted to locate land in the Empire, spread themselves among the hills and valleys of Greece. Sometimes they paid tribute; sometimes they exacted tribute, but they were not the worst enemies Rome ever had. Many thousands joined the Roman armies when the Roman youth were incapable or unwilling to fight and they always had such respect for their superiors, they called themselves allies and auxiliaries, and even Romans. Further than this, it is believed Constantine wished to rid himself of the thralldom, which the popes were exercising first of all over the Italians, and then on the cities beyond the Alps, in that they were struggling to unite temporal and spiritual power, which Constantine showed all through his subsequent history he was anxious to prevent or counteract.

Constantine was a soldier when first he arrived in Gaul. He had been detained at the court of Diocletian in Nicomedia not far from Constantinople, it is believed, as a hostage for his father, who was sent to Britain, and as soon as Diocletian consented to his visit, he made an exceedingly rapid journey and reached his father just as he was setting out from Boulogne and accompanied him to Britain. Some time after arriving, his father died at York and the army invested the son Constantine with the purple. He subsequently reduced to subjection all the warlike tribes in Gaul and Germany, and on the Rhine and the Danube, and as one of six colleagues he overcame them by the rapidity of his marches, by his tactful address and by his courteous manner of yielding where to decline would be dangerous, the last rival being Licinius whom he besieged at Byzantium, followed across the Bosphorus after his escape and at last subdued him and sent him an exile to Thessalonica, where he soon died.

Before Constantine's reign the emperors acquired the habit of living in some remote city as pleasure and convenience seemed to dictate. Diocletian passed his days between Nicomedia and his villa in Thrace and seldom appeared in Rome. Constantine in all his military expeditions beyond the Alps and the Rhine was but twice in that city. There the generals of the army were compelled to report east or west, and the ministers of finance and government were unwilling or unable to call them from their retreat. Then in 364 the government was divided between the capitals and also there was a division of the Roman territory in 395 between Arcadius and Honorius, who were elected emperors, the one taking the east and the other the west, which drew with fatal effect the capitals from each other.

Constantinople was a Greek city, its inhabitants were nearly all Greek, as ancient Byzantium had been from its foundation, but the language of the court and the laws it promulgated were all Latin. Most of the institutions were copied from the literature of Rome. The scholars that had so long come from Germany to be educated and from Gaul and Britain, became more enthusiastic for the new city as the grandeur of the old was eclipsed by the new. The Barbarians that had a predilection for peace were allowed to come in small numbers within the city gates; very many of the Goths and other tribes were allies if not auxiliaries of the army and as they were all Arians and the Christian or Catholic element was Athanasian, the disputes were often serious and vexatious. The emperors claimed relief from constant fusilades of courtiers and army magnates who had offices to solicit or friends to promote and they maintained at a safe distance the quiet of the villas, but corruption brought on decline and decline meant loss of territory.

Constantine died in 337 and in the reign of his successors the possessions of the Empire gradually dwindled away till the time of Heraclius, a period of over three hundred years. The Western Empire abandoned Britain in 438. Gaul fell to the tribes of Germany with as much a hold as possible by the popes. The Vandals took Africa, Sicily and the Islands and the new Persia which succeeded the Parthian kingdom—the Sassanians, took back all the lands beyond the Euphrates, which the valor of Trajan, Aurelian and Julian had won. They divided Armenia with the Romans and levied a tribute upon them of eleven thousand pounds. All that remained to the Romans was from Tyre to Trebizond on the Black Sea, a part of Greece and Italy and the adjacent coasts of Asia Minor. Carthage still remained, but Egypt, which had been exempt from war since Diocletian was again subdued by the Persians. In the beginning of the Seventh Century, they had taken Damascus, Jerusalem and Antioch, and in 616 appeared on the Eastern shore of the Bosphorus at Chalcedon, where, without attacking the city they held their camp for ten years and to all the suppliant embassies of the city they manifested supreme contempt. Neither would they accept tribute. In this emergency Heraclius, who was ex-arch at Carthage after the fall of the Vandals, was recalled and made emperor. The arch-bishop confiscated the consecrated plate of the churches and even Alexandria sent donations to swell the modest wealth of the city. By this means he was able to collect from every quarter and provide the expenses of an army and Heraclius started by sea with a fleet, which could not be circumvented as an army would be by land, and passing to the east entered the harbor of Scanderon in Cilicia, pursued his course through the Black sea and the mountains of Armenia and passing the winter on the shores of the Caspian he reached Ispahan, the following spring, the heart of Persia. Chosroes hastened home to battle with the Romans and with much skirmishing at length ventured a battle at Nineveh, where he was overthrown, and a few years later was murdered and the house of Sassan came to an end in 640. Heraclius returned home at the expiration of three years having made an alliance with the Turks whom he found dwelling on the north bank of the Oxus, and received from them a re-inforcement of forty thousand horse.

In the meantime, Chosroes had made an alliance with the Avars who had come down from the Northeast, nearly a century before, and on arriving at Constantinople in 626, Heraclius found they had broken through the long wall of Thrace and assaulted the capital. In their long acquaintance with the Romans, they had learned the science of attack, they advanced under cover of protected roofs. Their engines threw volleys of stones and darts and twelve lofty towers, which they built, gave them an ample view of the city. In this emergency they were surprised by a sudden downpour of fire, which was uttered forth from the mouths of engines within the city walls. The Avars wavered and then withdrew from their lofty towers and set them on fire. What ships they had in the harbor, they also set on fire and burned and the Chagan commenced a retreat. The Persians were unable to help their allies as they had no boats to cross the straits and no shipping of any kind, which the Greeks would not have destroyed, when once they had set out for the Western shore.

Besides the Persians carried on their wars against the Romans with very little spirit, when they were away from the sight of their capital. They were both equally faithless and pressed their deception at every opportunity to cover up broken promises and conceal new plans of taking advantage of each other. They were like lovers, who in a fit of spleen or jealousy become estranged and after the bitterness is endured for a while become weary and learn to kiss and make-up.

In the struggle for succession Chosroes had once fled to the Romans, who were proud to receive him and accept his confidence. It was impossible to starve the city, because the sea was open to their merchant vessels, and they traded with Alexandria and Carthage and other ports in Africa with Sicily the great granary of the west, and ports on the Black sea, a great shipping point for corn and in times of scarcity with Gaul from whither they brought it down the Rhone rapidly into the Mediterranean.

The historian who dismisses the siege of Constantinople with the remark that the "powers of fire and mechanics were used with superior art and success," gives us no information of what that fire consisted, nor the nature of the mechanics, which were used to deliver it with success upon the heads of the besiegers. In a previous attack upon the city in the time of Justinian, 553 A. D., he coolly informs us the city was "saved by the union and fermentation of iron and sulphur," and about the same time, when the Persians attacked Colchis, which lay at the mouth of the Phasis, which empties into the north end of the Black sea, he says, "Sulphur and bitumen, which might be called oil of Medea, was first used," which certainly is an error as has before been shown as early as the reign of Zenobia, if not of Septimius Severus 201 A. D., the oil of Medea or bitumen had been used for the same purpose at the sieges of Atra and Palmyra. Now it requires no great discernment to perceive that the oil of Medea or petroleum and sulphur were but little more active agents in protecting a city than would be either of the ingredients by themselves if the mechanical power employed was simply able to cast them over the wall, which could be done by hand, as in this instance of the Avars they were the besiegers and not the besieged; they knew nothing of the use of this destructive compound, while the besieged not only had the knowledge, but they had no use of mechanical engines, when they could do the work by hand from the tops of the wall. Fire brands, bitumen and sulphur did not require active agents to distribute them from inside the walls, but when you put them in combination with an explosive, the best mechanical power was requisite to give them suitable effect. We doubt if under cover of their tortoises, as they were called, with uninflammable roofs and only the two ingredients were used by the besieged they could have put an army to flight as these Greeks are said to have done.

Now one horn or the other of this dilemma must be supported, either the combatants knew nothing of Greek fire, in which case mechanical contrivances for dispersing the fire are fruitless and should not be mentioned together as though they were in constant and necessary connection with each other, or else the real Greek fire was known before 626 in the siege here mentioned. If we have the implement for delivering Greek fire, we certainly must have the fire, and we have no knowledge that any considerable improvement had been made between 626 and 679 by which the three ingredients of sulphur, bitumen and nitre, which constitute, as we believe, the real Greek fire, could be dispersed with greater effect than when there were only two; we conclude that the siege of 679 was equipped the same as the one that preceded and only had what it had borrowed from its neighbors.

Constantinople was besieged by the Arabs for six years, from 672 to 679, and again in 717 by the same people and for the same purpose, to spread the religion of Islam or Mohammedanism. This war was one of religions and not of races; it was characterized by a ferocity that put to blush all former wars and deluged with blood more than one-third of the face of the globe. From an obscure city and an obscure family it drew within its charmed circle not only generals with the talent of conducting great armies, of sultans and caliphs whose ambition was to equip and support them, but men of knowledge, of science and letters, who knew how to build great cities as well as to overthrow them, skillful to conduct negotiations, able to look ahead and patient for results, which were born of brain and not of muscle, a living embodiment of all the forces which the times produced, coupled with an enthusiam that forgot obstacles, forgot possibilities, forgot their own blood in the destruction of their enemies and on the altar of superstition, consecrated their lives, their fortunes and their eternal hopes to build an imperishable monument, not to God but to Allah, the God of Mahomet. It is clearly apparent he had an eye to his own interests by the revelations, which he promulgated from time to time as his own necessities were discovered, that the kindness which he inflexibly maintained towards his wife, Cadijah, was more potent than command and more resourceful than argument and to Abu Tali, his uncle, and Ali, his son, he opened up such splendors of this life and the world to come that they insensibly embraced his opinions while appearing to oppose them. To the obsequious Zeid he offered freedom and to the Koreish of Medina, who bitterly opposed his pretentions, and to the chief ruler of Mecca, who conspired to slay him, he replied by escaping in the dead of night to Medina, which has fixed the memorable era of the Hegira, from which proceeds the lunar years of Mahometans. His famous doctrine, "there is but one God and Mahomet is his prophet," is perhaps the boldest assertion ever conceived and embraced by one man to connect his image with the Almighty.

To one who inquired of his ancestry he answered, producing his sword, "this is my pedigree." He came to his doctrine by no sudden inspiration; he was in a land of Jews and Christians and they uniformly taught their belief in one God, whatever false views they may have associated with it. They had been settled in that land for over six hundred years and their beliefs had attracted the consent of vast numbers of men. Mahomet was a great reader of the Jewish writings and he slightly changed "the sword of the Lord and of Gideon" and substituted therefor the more pleasing name to him of Mahomet, which he said to Cadijah, his wife, was better. If he could make the people believe this he had a secure title for pre-eminence, as his terrestrial life was an image or concept of the celestial and the principle of reverence and worship of the infinite which was felt in all their hearts would lift him head and shoulders above the race of mankind.

In the course of ten years he had secured a sufficient number of followers to publish his faith openly and to draw the sword to supplement his faith. He attacked the caravans, which carried the commerce of the east to the west. The Persians who always made claim to Arabia were his nearest neighbors on the north and east, and the Mahometan faith was presented to them in an auspicious moment, when the house of Sassan, the second great empire of Persia, was passing away; further than this the result of the battle resembling a skirmish turned out so disastrously for the Persians they soon lost what little hope they had and their enemies were correspondingly elated. While the Persian bowed under the severe stroke of Islam there suddenly appeared upon the scene a new competitor for glory and empire from the far north, the hated Turk, who had once before made himself familiar to them and the Romans. His dominions extended from the right bank of the Oxus westward to an unknown distance and northward to the neighborhood of the Arctic Circle, while the south bank of the same river was occupied by the Persians, and Chosroes had married the daughter of the Turkish chief, so that the Persian soon found himself hemmed in by two warring nations, one of which was a desperately religious enthusiast and the other without any religion was willing to throw his sword into the scale of the victorious warrior. The Turk was already an ally of the Romans and in spite of his affiliation with the heir of the house of Sassan, he contributed not a little to its overthrow. The Arabs established themselves in Persia by the middle of the Seventh Century. In the meantime they had overrun Syria, Palestine and Egypt and they continued their victorious career to Carthage and Spain by the opening of the Eighth Century. Therefore, when they appeared at Constantinople in 668, or as one author has it in 672, the terror of their name had spread consternation throughout Europe and the Eastern capital.

The Saracens were so far superior to the Persians in military preparations, they were possessed of a fleet and since the conquest of Syria, they had control of the mountains of Lebanon and cut large quantities of ship timber and piled it along the Phoenecian coast at Jaffa to build and equip the vessels of Egypt as they were needed. The Arabian fleet cast anchor seven miles from the city and from night till dawn, till dawn again, they pushed their impetuous columns from the Golden Gate to the Eastern Promontory and placed their battering rams and engines of war in position to attack the walls according to military precedent. But great dangers are sometimes averted by great resources and when they commenced to man the ramparts for a siege, there came down upon them a rain of artificial fire, such as they had no record in all history. The walls were lofty and solid, the flying flame seemed to them the messenger of death and the blast of trumpets and the shrill sound of leaders invoking to battle with the promise of immeasurable rewards here and of Paradise hereafter, seemed to have lost their wonted inspiration. The Roman energy was re-kindled with the fires that burnt up or destroyed the movable turrets. When once the fire was started, it was not easily put out and the engines of the besieged threw the devouring element with great energy and at immense distances. The fugitives that had fled from the fall of Damascus and Alexandria entered the gates and worked the engines with enthusiasm till the Saracens abandoning further hope on the appearance of winter, retreated sixty miles away to Cyzicus, where they had their magazine of stores with the loss of thirty thousand and the venerable Job, who had once succored the prophet.

For six years the same tactics were repeated with no visible sign of success, when in dispair they made peace with the Romans and a solemn truse for thirty years and a heavy tribute and a farewell. That the generals and the caliphs respected this truce is apparent as they did not again appear in Asia Minor till 717, when the siege was renewed by a remarkably obstinate attack and defense of the capital by the two armies and the immense slaughter which the Greek fire wrought with the followers of Islam. They were now possessed with a mortal fear of this compound, which could not be attacked or put out. Their chief resource was confined to keeping out of its reach, but the vessels of Alexandra and Africa were subject to the same malign influences and the mariners of many hundred transports deserted in a body to the Christians. Famine and disease followed in the train of this unholy war to the disconfiture of Moslemah. Leo, the Isaurian, was now on the throne of Constantinople. As soon as he heard of the invasion, he set himself to meet it with the courage that put to shame the feeble emperors who had preceded him. He drew from the Danube an army of Bulgarians by suitable gifts and promises, and these savages inflicted a slaughter of twenty-two thousand. The instinct of fear gave rise to the story, which was not disputed by the Romans, that the Franks from beyond the seas were arming in their defence. Added to this the insufficient supply of food was a great drawback, while the city being supplied with abundance from the fisheries caused them to hesitate, and after a siege of thirteen months the Caliph consented that Moslemah should retreat. In its departure through Bythinia, a large part of the army was cut to pieces and the fleet was so damaged by fire and tempest that only five galleys entered the port of Alexandria.

We are chiefly concerned with the statement of the historian, namely, "The important secret of compounding and directing the artificial flame was imparted by Callinichus, a native of Heliopolis, in Syria, who deserted from the service of the Caliph to that of the Emperor." The historian in this case is careful to observe that "He should suspect his own ignorance and that of the Greek guides, who are so jealous of the truth," and it may be said so indifferent to relate it. Now all the particulars of the reign of Zenobia for four or five hundred years earlier are related with minute accuracy of her husband and of his murderer and the manner by which she made the murderer pay the penalty of his life, together with the confession of Aurelian that by the use of artificial fire thrown from her military engines and every species of missile weapons she was armed with such desperate courage, that he could only trust in the protecting deities of Rome.

Now to state that the important secret of compounding this flame was imparted by Callinichus is not pertinent, for he has already said that in 201 A. D., at the siege of Atra in Persia, the siege train of Septimius Severus was burned with naphtha, while in this case the principal ingredients of Greek fire was naphtha or liquid bitumen, though he afterwards adds, it was mingled with sulphur and pitch. Let it be understood, then, that it was naphtha, sulphur and pitch. We have yet to see that these alone constituted the main ingredients of Greek fire. If it be so, then Greek fire was never in the sieges above mentioned, because he relates that it was an obstinate flame, the size of a hogshead and with a tail like a dragon and report of thunder, which manifestly was far beyond the power of bitumen and sulphur. A fire of this kind would be nothing more than throwing a torch, which was no discovery at all and nothing which required an engine to disperse it, or which when dispersed, could produce a report like thunder and fly with the velocity of lightning. Further, the world is now and always has been familiar with the use of fire; but when we speak of any mechanical arrangement in connection with its use, we mean something more than ordinary fire, and so we must construe all cases, where they are associated together. In this way, if we have nothing more than sulphur and bitumen, the world had known it five hundred years before the siege of Constantinople. The evidence points conclusively that the thunder and lightning evolved from a fire the size of a hogshead must have been the result of an explosion and not of simple fire, and that explosion could occur in no other way, as we believe, than by the addition of nitre. How this could have happened and the fact have not been published to the world in some form has been stated.

Let us look at Callinichus. He is but little known, at least he is not well known, and that makes the claim more suspicious. As a native of Heliopolis in the Syrian desert, between Damascus and Palmyra, where the caravans usually travel, when they take the central road, coming up from the Gulf, it is certain he was neither a hermit nor a recluse. It is very remarkable that he should have an invention of such a valuable character to deliver at a time when its need was of the greatest possible moment; when the arms of Islam had overthrown the cities of Syria and in the height of their fame were planning to take the last stronghold of the Christian faith, not a Christian himself and obviously long enough possessed of the secret to have derived the greatest benefit from the Sultan if he had been so disposed. It would have approached a miracle if he had rejected the opportune moment and keeping the secret within his own breast had thrown it without recompense to the Christian dogs. Such a possibility may mean little or much to those who interpret the history, but we are far from believing that the knowledge of Greek fire was known only so late as the siege last mentioned. We would sooner believe Callinichus came into the knowledge of it from some foreign source, presumably from China, by way of caravan and that he made it an object to advance his interests in some way by claiming the secret of its discovery or preparation as his own. He may have come into the discovery much as McPherson, who could not write, himself, but could interpret the poems of Ossian and by adding here and there a line and supplementing them with links and amendments, which he was able to furnish, made the work of another appear as his own. He was not like the great navigator, who had opened up a new world, about which he had dreamed and read and written until he had made the foundation of a brilliant discovery. Rather was he the fortunate man who, seeing a smouldering fagot, which somebody had left uncovered, picked it up, brought it to life again, and with skillful hands and trifling loss arrested the conflagration of a great city. It was in the end setting up the despotism of the gun with all its cruelties for the despotism of the sword, which was itself more cruel, as Aaron's rod swallowed up all other rods. With but a small part of its effective force so opportunely engaged, developed and dedicated to Christianity, it rolled back the terrible torrent which had startled the nations of Western Europe and quenched the hopes of the East in blood till the absorbing and brutalizing process of Islamism could be verified and its limits determined by the virtue, the valor and the resources of the nations which were first to develop under Charles Martel on the Plain of Tours. The innocent agent of procuring this combustible, or explosive as it may be termed, while thinking no doubt of personal and immediate gain, was worthy of the lasting gratitude of the nation, and for the Greeks, who guarded it with scrupulous care, it was the Palladium of their liberties for four hundred years. Whatever opinion we may form of the nature of this compound, whether two or three or more ingredients, nothing new developed for several centuries to pave the way for modern firearms. The weapons of the Greeks were the weapons of the world, with this invaluable discovery not yet set free.

The City of Constantinople was attacked four times from 782 to 1043—by the Hungarians in 924, by Alexius Comnenius in 1081, by the Franks and Venetians in 1204, and occupied by them till 1260, and attacked by the Turks once after the Crusades, and finally taken in 1453 by that nation. Mahomet died in 632 at the age of sixty-three years, and the reign of the Caliphs commenced two years later. In that time the Crescent has passed beyond Africa, across the Straits of Gibraltar into Spain by the year 710, and, crossing the Pyrenees, it reached out one thousand miles from the coast of Africa, fighting its way along the Rhone and the Loire till its victorious arms were suddenly checked by the valor and genius of Charles Martel, son of the elder Pepin and Duke of the Franks, in 732. Christianity had a chance to breathe from the Crescent and the scimeter, and the tide of war was eventually rolled back in the East, so that in three hundred years from the death of Mahomet all Spain, Africa and most of Syria, including Damascus, Antioch and the cities of Cilicia had been lost to their arms and restored to their ancient rulers, and Persia had recovered five of her former cities, including Nisibis in Armenia, which Jovian was compelled to give back to the Persians on the retreat and death of Julian. The passage of the Tigris, which had been so long denied to the arms or even the sight of the Romans, was again opened up, and although on the retreat or return of the Greeks the fugitive Princes in some cases regained their capitol, Antioch, Cilicia and the Isle of Cyprus became permanent additions to the Eastern capital. Only Bagdad remained to the Caliphs, who held this important centre for over five hundred years.

From the latter half of the Seventh Century to that of the Eleventh Century the Greeks, or as they called themselves, Romans, held in strict secrecy the knowledge of the ingredients which combined and saved their city. There was neither motive nor ability to bring the compound to a higher state of efficiency, or to popularize the discovery, so long as it subserved their purpose. It does not appear that they instituted any experiments by chemical analysis to make the two or three ingredients explosive, or to introduce projectiles. They may not have known what an explosion meant, and a period of four hundred years was necessary before some thoughtless traveler, in kindling a fire, threw the nitre and the refuse of wood fire—the charcoal—into mutual relations with each other. Nitre itself was not explosive, and at this time the oil of Medea, or petroleum, seems to have dropped out and charcoal came in, as we hear very little of petroleum afterward. We believe at this time the discovery was complete, so far as the combustion was concerned, but the propelling force did not appear till after or about the time of the Crusades, when it became a projectile. We believe that the terrible secret was permitted to remain hidden so as to avoid the possibility of some unscrupulous person blazing it abroad. In the hands of one person of known loyalty it was safe. In the hands of several the danger would be increased as many times more. At this time, under the reign of Leo the Isaurian, and Theophilus and Pope Leo IV, the city enjoyed its greatest prosperity, commerce spread its wings, but the vigor of the Saracens dwindled away into the same channels of luxury as had the Romans, and in this case they were of material benefit to them in later years. They brought out and studied the various writings of the Greeks, in science, philosophy and medicine and in physics, and when they were inclined to levity, with a tinge of seriousness added, they pursued alchemy instead of astrology. They recovered some books that would have been lost to the world without them. They were prolific writers themselves, especially in Spain for five hundred years, when darkness had settled over Europe. As this period of darkness began to pass away, it is believed they instituted the use of closed tubes by which gunpowder was projected, and it cannot be disproved that they invented gunpowder before the time they were driven from Spain into Africa by Ferdinand and Isabella. At this time we are writing they had not become so conspicuous in benefits to the outside world, and what they did not produce themselves they purchased freely of their neighbors, so that luxury became to be the rage with them, as it had been with the Romans. The Caliph's slaves were clothed in splendid apparel, their belts glittering with gold and gems. His palace was profusely furnished with the choicest tapestries, many thousand of which were embroidered with silk and gold, a tree of gold and silver spread its luxurious branches on which gorgeous birds spread their wings of silver.

The wisdom of the Saracens was most pronounced in their system of religion. When Mahomet proclaimed the one God, he did not make any distinct or valuable addition to the doctrine of the Jews or Christians.

In this way he avoided the antagonism and gained some credit for generosity. Furthermore, he proclaimed a determined war against images and idols. He appears to have acted honestly in his earlier teachings, and when he found himself unable to succeed without arms he took to arms. He had before him the command of God to Israel to destroy the Canaanites root and branch, and so the foundation of Jewish writings allowed him to build a scaffold on which to hang all unbelievers. His life was a romance garnished with strange adventures, a poem of new and unaccustomed harmony. While converts were coming to his doctrine and coin was flying to his coffers, traffic was the only employment which the Arab cultivated. All others fell to menials. He was the Father of the Faithful. His revelations inscribed in the Koran were of equal value with the sacred books of Israel, and his destruction of images shut him out from all alliance with paganism and pagan worshipers and pointed the way to claim authority with God. He died in the fullness of faith, saying, "I come, I come," equal in loftiness of utterance to the most heroic martyr.

Paganism was the ruin of the Roman Empire. When the survivors of Troy arrived at Latium, on the banks of the Tiber, that river was covered with bushes. The hills were cut up and apportioned among the tribes of Umbrianas, Sabines, Oscans and Latins, and each family had its genii or Lares and Penates. They were children of the earth, they had grown up among the hostile and destructive forces of Nature, they had listened to the moan of the trees, had seen the sudden swinging and erratic charge of the elements, had shuddered at the throes of thunder, and had measured in their limited way the effects of the lightning as it burned up their frail dwellings or crashed along the cliffs which overlooked their homes. Power is always represented by some visible or imaginary creation. In imagination Death is swallowed up of Life, the Creator is always greater than the thing created, the heroes have become gods; why not the mysterious forces of Nature? Then began the first impulses toward an imaginary Pantheon. As it had been in Assyria and Babylon, as it was with the Israelites, as it was with Abraham resting under the oaks of Mamre and pleading for the cities of the Plain, ready to be engulfed with fire for the worship of false gods; as it was with Greece, perishing before her time but listening with wrapt ears to the voices speaking from the groves of Delphi and Daphne, the oaks of Didona and the sweet, mysterious cadences of the Vale of Tempe. Now, Nature men are not harmed by the mysteries of Nature. The gods whom they affect to serve are false gods. They are but few, their fellowship is sought only for good acts, and the violence that follows long after a state or nation is developed requires that bad and base acts shall be propitiated by a monster as cruel, as remorseless as their own souls have become. Murder, rapine, license to do evil, licentiousness and its secret worshipers, worship not only the sun, moon and stars, but they worship whatever their vain imagination may set up—the most ugly, cruel and degraded forms and the most disgusting images imagination can paint. By this means the better nature is killed. Luxury is not the only power in the destruction of nations, it is only a stimulant which has its root in the morbid and diseased creations of a man's self. If the Roman Empire could have maintained its robustness through all the decades of its expansion, even though the Satyrs dwelt in the woods and the Fauns on the hilltops, and the Tritons trod the waves, Liberty would have remained a sacred treasure, and the eagles that hovered over the city would have borne its arms unsullied from ocean to ocean.

If Christianity was one of five causes in its destruction, why has it so changed its character that it uplifts, sanctifies and ennobles every nation that receives it. Every system that aspires to universal authority must have some defects in its organization, some things creep in which are not needed, gain the respect and alliance of some individual which is unworthy, and the whole system receives a loss if not a shock thereby. Monasticism was the first fruits of a literal interpretation of the commands of the Gospel. Time and experience weed out the difficulties without destroying or endangering the leaven which is working out the crudities which are inseparable from lasting structures. It is admitted that the winds of Africa and Arabia, which swept over the flying sands of the Desert, carried the stifled moan of many penitents who sought by the stripes of the body to atone for the sin of the soul. One or two sanguinary wars would have carried to the death more victims than all that perished with these self constituted sacrifices, which corrupted and destroyed nobody else, while they missed God and found only themselves.

What shall be said of those that found God, devoted to him the sanctity of their lives, and under the solemn sentence of death gave it up willingly to the executioner. We know very little what the Christian church did for two centuries after their Leader left it, but the most ardent unbelievers recount that it went about doing good, abating the hardships and cruelties of war, and so opening up the way for the better civilization which is crowning the hopes of today. If we had nothing more than the seven churches of Asia, their history and the letters and acts of the heroic Paul, we should have an answer to every critic who casts a doubt upon the supreme importance and final conquest of Christianity. We can lawfully claim that Christianity did not work the ruin of Britain, Gaul or Germany, because those countries had not received Christianity when the Western Empire fell. We can maintain that Armenia and a large part of Asia Minor, which were the first fruits and always earnest for the faith, were as loyal subjects as the Empire ever had. It is certainly clear that Rome fell largely by the false gods which she introduced into her bosom, full of all the vices which the human mind can conceive, cruel and lustful, but their time was shortened as soon as Christianity became the ruling religion in Rome. When there was nobody to believe in their existence and no one ready to sacrifice the temples were abandoned, but the insidious venom which had eaten its way into the throne of the Cæsars had corrupted the morals and enervated their bodies and luxury was only another name which cropped out in the orgies and follies of paganism, which would not have been noticed and certainly not fatal if the hardy and trained veterans of Italy had not been followed by a breed too puny to hold the reins of Empire and too selfish to abandon them on the road to death. Only eighty years intervened between the fall of Paganism and the fall of Rome, a time altogether too short to be saved by the religion of Nazareth.

During this four hundred years in which Greek Fire was locked up in Constantinople with no inquiry and as little concern in regard to it by neighboring nations, a Holy War, not by Saracens or infidels, nor by the undisciplined remains of Paganism, which in some quiet quarters still survived, but by the followers of the Nazarene himself, surprised the world by its magnitude and the bitterness of its fury which embroiled the nations of the West with the East, and threw them with terrible fury against each other. Jerusalem had been taken by the Arabs in 637, and later by the Seljukian Turks, who in the tenth century followed Southward from the Oxus, and overrunning Asia Minor, now Anatolia, drove in the wings of the Mahometan army and stripped them of all their conquests in Syria. These Turks had forgotten all their pledges to the Empire, had embraced the religion of Islam, and while they secretly admired the veneration of the followers of Christ for all that remained of the founder of their religion, and saw with no concern its footsteps trodden by an undisciplined horde to the gates of the Holy Sepulcher, their vanity was inflamed by excessive tributes which the Christians were forced to pay, till at length they provoked them with repeated insults and threats to compel them to discontinue their visits by the sharpness of their railery and by actual conflicts which they were unable to avoid.

The Turk was bloodless in his make-up though so profusely he could shed blood. His natural sympathies had been blunted by the rigors of an unfriendly clime and by the hardships of an unsympathetic government which made him stubborn and revengeful. He could cover the grossest outrage under the most affable and pleasing exterior. His thickset, squatty figure, when resting on a carpet or a divan, resembled an idol from the banks of the Ganges. On the assurance of Mahomet that the sword was the key to hell or heaven, he bounded up from his seeming lethargy, declared his belief in the faith, and threw his sword in the balance against the Christian dogs.

The crusaders began their war in 1096 by influencing Western Europe and all the nations who were under the dominion of the Emperor of Constantinople, or the Pope of Rome, who were called upon to fight the Northern invaders. Without following the dreadful avalanche which desolated Europe of its surplus inhabitants and threw them with remorseless slaughter on the shores of Asia, which drained the resources of kings and threw it away on the sands of Syria, we must admire those noble souls, who in the heat of misrule and oppression, divested themselves of every glory the world had to offer them, suffered all the contempt which unsuccessful struggles threw in their way, and to the last battling as they believed for the glory of God, were cut to pieces in the desert, and with their last breath begged only to see the beloved city from which their Master had ascended to Heaven. Of these last were those souls whose story opened with Godfrey of Bouillon and ends with St. Louis IX of France, who saw slip from his grasp what his brother with more success seemed to have obtained, and impatient to give up the cause which he had consecrated in his heart, led the two last of the nine Crusades and perished at Tunis, unable to get out of Africa. Jerusalem was conquered and reconquered by the Latins and at last taken by Saladin of Egypt who had taken it from the Turks, after being in the hands of the Crusaders for eighty-eight years.

We are anxious to know what relation the Crusades sustained to Greek Fire, for the Emperors had all knowledge of its manufacture till they commenced. The first Crusaders that escaped safely from the Turkish sword after they had crossed the Straits, an undisciplined and really bigoted crowd of fanatics who went only from sudden and uninformed impulse, broke like a great wave on the shores of some desolate Island and drove its ragged edge upon the shore in spray and foam. They brought nothing for a siege but what they held in their hands. Many of them had neither a scrip nor wallet, without sense in their heads nor bread in their bodies, or breath in their bones. Their horses were few. The knights, as they were called, rode them in armor and would not unhorse themselves to make teams for transport or burden. It is probable that their leaders were supplied with Greek Fire, as they were constantly in communication with Constantinople, but as they had no means of throwing this compound over the walls, while the besieged could easily reach the top of their walls, with the same means of defense, the Christians were put to a great disadvantage. In a few days the desperation of necessity set in. A straggling party observed some timbers near the coast adjacent to Jaffa, which had been thrown into a hole and abandoned, and dragging these out, they made a scaffold, after transporting them to the city, reached the walls, and the fury commenced. If we may believe the reports sometime later one of the leaders saw a sign in the heavens which resembled a picture of St. George, and crying out that the angelic band was coming to their deliverance, they made a sudden and successful attack, and Godfrey was on the top of the walls. How far Greek Fire was employed or permitted does not seem entirely clear, but we are told that the Saracens had discovered its secret before the siege commenced, and if so, the equal fire from the contending combatants would have been less perceptible, and its extent might not have summed up to very great aggregate proportions for either party. Possibly in the first siege and with such irregular attacks, the use of the combustible was limited, but as the struggle was kept up in some form with varying success for one hundred and seventy-six years, it must have won considerable merit in shortening the period of the Crusades. It was believed at the outset that it would unite the Latin and Greek princes, but when the Latins in 1204, forgetting their allies altogether, took Constantinople away from the Greek Emperors and held it for fifty-six years, all signs of amity and compromise were swept away.

If the Crusades had done nothing more than set a bound to the ambitions of the Caliphs, and hold the fanatical followers of Islam away from Constantinople, it would have been worth a vast deal to the peace of the world. This it did for three hundred and fifty years, and Western Europe, in its era of darkness, was saved from the scimeter of the Saracens.

With the abrupt close which Islam met in France its empire was shortened and almost disestablished. By that time the studious and conservative people of the city awoke to the future that was dawning on the Eastern Capitol, by the interchange of ideas which had flowed unrestrained where otherwise they had lain dormant to the Reformation, by the decay of feudalism which allowed private fiefs or holdings to increase into dukedoms in the hand of dukes, and they into larger divisions to form at last stable monarchies. The loss to Western Europe by the Crusades was incalculable, but its gains were far greater. Man had become less a subject and more a lord, but he was his own lord. Talking and thinking became more earnest and more to the purpose. The follies are always remembered when it is a losing game, and the remedies become less imaginary. Deeper mining brought to the surface subterranean riches; as the storm broke away mistakes were discovered. The early sun forced its way into porticoes and hatchways and darted under the eaves where bright thoughts sallied out as swallows salute the daybreak. It said "Good morning" to many a weary traveler flecked with dirt and wet with the midnight rain. Society was reforming. No man or set of men could hold the strong box into which all the credits of a nation were stored and hold the key without honest possession. The cap of Gesler rolled in the dirt.

In two hundred and fifty years from the commencement of the Crusades the genius or enterprise of the Christian world seemed to have revived with new vigor. What did all wars mean, without swords and spears and cruel instruments of death. The new enterprise had this meaning. The time was coming, indeed had come, when the Chinese or Greek Fire was to put on its crown with no weak apology for its being and reign uncontrolled, the most brilliant discovery that had appeared. Gunpowder and fire arms preceded the art of printing by a hundred years. The Divine promise of "Peace on Earth and Good Will to Men" might have been chanted on the wings of the morning as the outcome of this discovery. It was not the reformation. It preceded it, dignified it, and if we will receive it, was a tender reminder of the flight from Paradise. The mission of the sword was ended, the ministry of Peace was to begin with new weapons; no savage nation could ever control gunpowder. No Christian Emperor could ever lock it up as a menace to the rest of mankind. If it were necessary to store it, the Christian world would have ample means to destroy every other nation, without the savagery and cruelty of missile weapons.

The exact time and place of the discovery of gunpowder is unknown; the channels of information, as well as of trade, were not thrown open in the time of the Crusades, and we are less surprised that in the five decades after their close more and better knowledge of arms came to light than in the fifty that preceded. It did not come by the red cockades of chivalry, but in 1325 or 1326, in the City of Florence, Italy, a council of twelve was appointed to superintend the manufacture of cannons of brass and balls of iron, and in 1327 Edward III used the first ordnance in England in his invasion of Scotland. Within fifty years these munitions of war were considered indispensable and they were offered on the market in limited quantities, till the time of Queen Elizabeth, when taxes were paid partially in arms, or the material to make them. The Moors of Spain at that time were the most enlightened people in Europe, and their globes of fire, with resounding thunder and lightning, were their efforts at artillery. The moment that saltpater or nitre came in contact with ignited charcoal, an explosion of more or less force followed, and this force was equal in all directions. Not so with the weapons of war, which were hurtful only at the point of contact. To harness this force and put it into the service of mankind, required no great skill or time to develop, but its great purpose now and hereafter was to be not only an explosive but also a projectile.

Gunpowder and artillery appeared simultaneously. When the three or more ingredients of Greek Fire were brought into contact, a closed tube was necessary to prevent expulsion in every direction. Such tubes were probably used in the rockets of India for many centuries, and some elastic mind may have discovered its germ in natural processes which are common everywhere. The age supplied its own necessity, like a vestibuled train, it went straight when once it was started. It did not, like a horse with a nail in its foot, have to slow down. In this way it preceded printing, as men in a barbarous state prefer arms to anything they have to read. The earliest cannon were composed of iron staves hooped together, or thin iron tubes coiled round with ropes. For five centuries the production and use of artillery developed slowly. The ingredients of gunpowder had to be studied, as well as the resisting power of the arms. The powder used was a magazine of oxygen and when it exploded occupied two hundred and eighty times its original space. In the deflagration, the force exerted was forty tons to the square inch and only material of the closest texture would prevent the weapon from being shattered to pieces.

From the time of the Crusades till the middle of the fourteenth century, experiments in the manufacture of guns, indestructible by gunpowder, was zealously and steadily urged, and the Saracens in Spain were no whit behind their enterprising neighbors, the Latins. In invention they were the foremost people in Europe. The solid, substantial, mental qualities of the Western nations did not ripen equally in their variable climate with the lively and sporadic temperament which had suddenly sprung into affluence and kindled with the heat of a tropical sun.

In 1453 Mahomet II began and completed a task which had taxed the abilities of many generals for a thousand years through all the Dark Ages. Constantinople was not impregnable, but the arms of the Cæsars were obsolete. Greek fire had become a common knowledge to all the Eastern nations, so there was no superiority to be gained by one contestant over another. The legions whose victorious eagles had borne victory along the Rhine and the Danube had wasted away in the sloth and luxury of degenerate times and people. The advance and charge of veterans, with sword and lance, and the munitions of modern warfare, were but child's play tilting reeds against stone walls. Mahomet was a Turk, but he was not of the house of Seljuk which first made an alliance with the Romans. He was of the tribe of Osman or Ottman and came from the same country as the Seljuks, though farther East than the lands occupied by them. When the Mongols arose in the latter part of the twelfth century, their ruler, Jenghis Khan, overrun the Northern part of China, breaking through the Great Wall. Then he advanced west into Europe, and in so doing dislodged the Ottomans, who for giving valuable assistance to a scattering band of Seljuks, obtained some lands and cities in Asia Minor, whence they extended across the Hellespont into the present Roumelia and Eastward into Syria, and then advanced into Cæsarea and at last into Egypt about the year 1300, when the Seljuk dominion came to an end. They became and remained Mohametans, as all their descendants are.

Some few months previous to 1453, Mahomet II inquired for and was shown a man whom he asked if he could construct a cannon that would reach the limits of the city. He said he could, and at the instance and under the commission of Mahomet, he constructed a great foundry at Adrianople in Thrace, 150 miles distant from Constantinople, where he cast a cannon that could actually shoot five miles, though so great a distance was not then needed. When this was done he transported it across the country by a whole train of wagons, and in the following spring appeared before the city with a great army. There he found this huge cannon was very imperfect and that it could not be fired more than seven times in one day, and in the end it went to pieces, though it had a bore as large as a man and weighed very many tons. It was a wise thought of Mahomet which brought it nearer the city from Galatea, a suburb ten miles away, and making a tram road of planks across the narrow Isthmus to the opposite triangle of the Golden Horn, in the basin of which he drew his galleys, he was able to place the cannon directly opposite the walls. In this way he finally made a breach and in fifty-eight days took the city.

As Mahomet at this time had several hundred smaller cannon it illustrates the great advance which military science had made. It is also to be noted that both sides used Greek Fire, so that in a test of strength its virtues were equally balanced, except in the case of the besieged who had no scaffolding to build. Both armies were sufficiently provided with every species of missile weapon, but they were as potent as jack straws against a deluge. The Greeks were short of gunpowder, a very serious circumstance, but in a siege of two months, and with a quality inferior to modern preparations, complete foresight was hardly obtainable. The progress of the siege need not be told from day to day, and from one discharge of thunderous artillery to another. The superiority of gunpowder was acknowledged and its use was open to the world.

Not all the barbarians who overturned kingdoms had produced a single discovery which in breadth of utility had been such a great blessing to mankind. It was a Hungarian that cast the great cannon. It was a Syrian who, if he did not discover, offered to a free people the happy combination of Greek Fire, which saved Christian nations for a thousand years, and Western nations indefinitely, from the sword of the victorious Moslem. On the other hand, it was the barbarians, a band of cutthroats and pirates, who first ravaged the coasts of England, pillaged everything they could carry away, made Gaul a land of free booters and Germany a hive of swarming vagrants without a home or country, and nothing to recommend them but their inimitable vigor, pluck and muscle, which was needed to intermix and build up the sharpened, sensitive and otherwise corrupted brains of the South. The Cimbri and Teutones started the march from the Northwest, the Goths took up the middle country, and the Turks and Avars the East. It was not a losing game for the Republic that dwelt on the Adriatic and the Mediterranean, if they themselves had preserved, not their boundaries of land, which fell to all men, but the more general virtue of common sense, which seemed to fade away in the track of foreign invaders. Christianity alone saved them, though it wrought slowly and came late. It is no disgrace to it that its Empire ended for a few generations in Africa, as Gibbon states, for it fell of its own vanity, in encouraging monks and Coenibites from all parts of the earth, and making a test of doctrines unauthorized and which need never be repeated again among men. Today the Cross is returned, not only to the rim but to the whole breadth of the African Continent, and its religion is not barbarian, did not come from barbarian sources and will not need to emigrate to retain life and vigor. To the barbarism that is past we can only use the curt saying of Carlyle, "Tremble, oh thou land of many spitters and jokers, for a pleasant man has come among you, and you shall be laid low with the joker of jokes and he shall talk his pleasant talk to thee, and thou shalt be no more." Shed blood is not good. What we want is living blood, flowing through stalwart bodies. Moses was a stalwart, and when he slew the Egyptian and hid him in the sand, his act was feebly prophetic of the dreariness and desolation of the government which was soon to fall to pieces.

When once artillery was invented, a new field of inquiry and discovery was open. Gunpowder and a gun of some sort, presumably a plain tube, was not at first attractive. Many persons thought it was or would be a failure. The action of gunpowder in artillery was most criticised because it was more common. The first cannon were breech loaders and were fired by a spark or a live wire, but it was only in the hands of a great army with a great commissariat and a plethoric treasury that its results were satisfactory. Kings could use them; the Edwards had a train of them; but the cost confined them to use in few battles. They were immensely heavy and when placed in the front of an army in a slight coupe or a sudden diversion by the enemy they were liable to be captured and turned against themselves. A change of front made its movement a troublesome necessity, and a large number of horses and many yoke of cattle was needed to make the change. On very rough ground or on a steep hillside it could not be moved, and was liable to be overtaken by the enemy or sunk in the mud. Gustavus Adolphus remedied this evil in part by making the cannon of very light weight and increasing the number, so that each piece of ordnance could be moved with a single span or yoke, and so distributed in different parts of the field that they could not all at once be captured, but then the range was much shortened by reducing the quantity of powder and the effect was correspondingly reduced. Strange as it may appear, the science of artillery was born nearly full grown, without being dandled on the laps or fed on the paps of people too proud to acknowledge the foundling. It was a breech loader then as it is today. The combination of the explosive was little different from what it is now, and the shape and purpose of the barrel was nearly identical with ours. The missiles discharged were first stone, then balls of iron, and sometimes they were launched red hot. The dimensions of the siege guns were of larger or smaller capacity as the necessity arose of scattered or concentrated fire, and the rifling of the chamber was not introduced until 1846. Solid shot were mostly used at the beginning of the 19th Century, when the French introduced hollow projectiles and grape shot held together by a net similar to the wire cartridges seen in our day, and the calibers of guns were reduced in size and made uniform as they now are. The cannon of Napoleon were not essentially different from those of Mahomet at the siege, and while the range of modern artillery has largely increased and is still increasing, all new discoveries appear along established lines. A distance of five miles for modern artillery is now no miracle and the present year has seen that distance attained with remarkable accuracy in four out of five shots, but the mammoth gun of Mahomet was able to carry as great a distance. We shall soon be counting on ten miles, and with substantially the same weapon. The new designs are mostly apparent in a few guns of increased bulk and weight which are not now so great factors as they used to be, and the innumerable quantity of range guns are of quite moderate proportions. But where the size of the shot is increased, the bore must be correspondingly increased also, so that it is able at one discharge to efface an army or a city.

The new explosives, while so numerous and so devastating, do not seem suited for gun service, as no gun could hold together under a generous charge of such material, while their liability to premature explosion from a sudden jar makes them extremely dangerous. Common powder needs no substitute as it is a force which is practically unlimited and controllable. We could almost close this record in the light that beats around thrones and armies that are to be shaken or annihilated in the presence of modern armaments, and that some government or some Napoleon is able to create or compel to resist. In the commencement of our inquiry we had in contemplation only a history of small arms and such as the sportsman could carry in the field and with which most people are familiar and evince the greater interest. The monster cannon which are seen only at long intervals by most of us are not models of beauty, are repellant to common understanding, when we consider that their initial discharge is of such great expense that a long continued use of them would threaten to bankrupt a nation. Masses make a government, but the best government is that which is reached through individuals. When gunpowder was first introduced, hand guns and hand grenades became popular. They seemed to be the offspring of and promoters of military spirit. The great military leaders came to learn of the superiority of infantry over cavalry. Then followed the necessity of an arm that every soldier could use and was capable of the highest degree of efficiency. The closed tube which sprang into notice with artillery was equally useful with small arms, and here was one element of its weakness which was not observable in the cannon. The cannon rested on a carriage and it lay prone before you. A live coal or a hot iron was all that was needed to fire it and the impetus was directed only in a straight line with the barrel. It was not a wandering machine that could be taken up by anyone and set down in another part of the field, while the small arm was portable by any one person. Two or more persons were necessary to handle army ordnance of the smallest caliber, while heavy guns required many horses or yoke of cattle, or some other outside power, to change its position. The new hand gun required one man to hold it up by hand on the shoulder and another to aim and fire, and something or somebody suggested a breech to take the place of the hand of one man, and a bent piece of wood at last adapted the gun to the shoulder. Still the gun man could not fire his own gun, and the time taken was so great that a whole flight of arrows could be let loose before a single charge could be driven home and unloaded. Some sort of appliance was necessary by which fire could be thrown into the pan, or the aim was useless. In the reign of Henry VII of England a hammer was introduced with some sort of a lock which was released by a trigger to a pan at the side of the barrel. This hammer held a match which ignited the priming. Next, the wheel-lock was introduced, in which a steel wheel protruded into the priming pan, and rubbing against a piece of iron pyrites, which the trigger released, produced sparks and set fire to the priming. The match-lock proved to be an improvement and remained in use till the seventeenth century, when the flint-lock took its place, which was in use during the American Revolution, and perhaps many of us have seen it. Little change appeared in the eighteenth century, but in 1807 a Scotch clergyman, Alexander Forsyth, obtained a patent for fulminating powder, which, however, was not put in use till 1834. Later the cap and nipple appeared, which made a complete revolution in the extension of firearms, and later placed them in the hands of the militia. It revolutionized the pursuit and capture of game birds and wild animals by hawk and hound and hunting leopards which brought them into captivity by distancing them in speed in the former instance and furnishing a weapon to battle with the ferociousness of the latter, who are placed now at a great disadvantage. It was a solemn answer to the burglar and highwayman and evil-doers of every breed whose inclination was foul and brutal. In fifty years and since our day, the flint-lock has been laid aside and the cap-lock has taken its place. The benefit of the change has been so important that bird and beast and creeping thing has been subject to the mind of man. The common gun meets enemies of every kind at home or abroad, on land or sea. Within a few years the breech-loader has superseded the muzzle-loader, and the safety of the weapon and the rapidity of firing has been so much increased as to become popular. In 1866 Prussia invented the needle-gun and proved its superiority in the seven weeks' war with Austria, and in the Franco-German war the breech-loader came to the front as the most popular kind of all, and its sufficiency was so far demonstrated that an army has not since been considered armed without it.

We shudder to think what the great captains of the world would have done if the modern arms that came into use since the discovery of gunpowder had fallen into their hands. Once was Europe and once was Asia nearly depopulated with the sword. The boom of cannon and the crack of the weapons of common infantry would have given a long sleep to the arts hovering in the twilight, waiting for a new day. Religious bigotry would have been armed with the bitterest rancor, and the curses of the dying would have shut out the song of the angels.

It may seem the essence of heresy to declare that war brought gunpowder; rather than that, gunpowder brought war. Nevertheless, the Holy Wars were not the fruit but the fountain and generous source of the discovery. Immediately the spread of learning began in the capitols of Europe, invention was quickened, the rasping of intellects of competing and unhomogeneous people was answered by sparks that set loose trains of thought that opened up the tiwlight of a new day, beat upon the thrones and empires that, going to decay, were wedded anew to the inspiration of the hour and brought to life a new and welcome progeny. Among barbarians skill and ingenuity reached nothing higher or more lasting than the weapons which they carried into the field and the small implements with which they tore up the ground and cultivated scattering crops. The better class held in fee and trod as they pleased the cultivable lands of their poor cousins whom they dispossessed. They ate up their substance, and then with cruel hand forfeited the life which had saved their own whenever they pleased. The ruling class that lived mostly in the cities were little better. The reign of the Emperors of Constantinople was a record of mutilations, of inquisitorial searchings after new methods of torture, without law, without courts, without precedent only as they made precedents—little better in the long run than that of the Khans of Tartary, who put to death at the end of the bowstring.

When the Reformation came, this whole batch of unclean things was emptied out. Some were picked up again, but the great mass of them settled down in a weltering pool, which society was only too ready to cover up.

Commerce in Europe and through the East began to brighten up soon after the Crusades ceased. Traveling, that had been almost suspended between

China and India and the West, took on new life. The industry in silk and silk goods revived, the caravans started anew and over a wider range of country. There were more buyers as well as more sellers. Industry was better rewarded; adventurers in the business world suffered less. Luxuries were more in demand, for they came from a wider country and reached a wider market, and were used in a more healthful and cleanly channel. The West gained in ideas to compensate for its loss of wealth, and all the channels of industry seemed pouring forth employment for individuals and communities, so that war seemed altogether unlikely, and if it came it would be controlled within barriers that Nature had made or that a congress of peoples had determined. The mariners were going out to sea beyond the limits of the land and beyond sight of the shore; the compass was the guide and new worlds were the consequence. Old things were passing out, the new were coming in. The Saracen was pointed to the shores of Africa, whither for a while he could sojourn; the Moors also beyond Gibraltar, and the haste that hurried them away was auspicious of the times and the state of the nations as well.

We do not know what explosives like gunpowder will accomplish in the future, but it is reasonable to suppose that whatever power they may be made to exert there is only one route along which they must all travel. Nature is not so generous as to give us two ways where one will serve, and the enclosed tube or cylinder will never become so old as to be obsolete. The weapons of antiquity have passed their prime—the sword must be relegated to obscurity as the reign of gunpowder extends and prevails. The singing spear of Homer will never more make melody for the legions. The bow will bend in solitudes where the tide and life of regenerated peoples beats in vain; on frozen shores or inhospitable lands, where commerce does not raise its flag. The province of the gun is to reach at long distances, and if war must come, blood shall not drip on our doorsteps. When modern nations shall accumulate great masses of firearms with sufficient ability for rapid firing and unlimited range, war will perish in a dream, for its expense would be fatal. Contracts long ignored between sovereign states will not be settled by the arbitrament of arms. Peace will follow compromises; diplomacy, which is only another name for deceit and the sophistries of courts, will give way to a better understanding of the laws and rights of individual men. Threats of war will pass away as doves fly to their windows. Great ships of steel, riding at anchor and buffeting the waves; great cannon bristling at every porthole; great armies ready for the field, equipped with every necessary that wealth or human ingenuity can furnish—these will declare the terms of peace. The hermit nation which adheres to primitive arms or methods must reform or be ground to powder. China, which has thrown open her great discovery, must take it back with largely increased powers and uses and put it into immediate commission where her empire extends. Japan has already thrown away her antiquated arms as she found them unserviceable. Our brothers across the sea have made their reign in India one of great practical utility, whose people, under great restraint by their native rulers and by immemorial customs, seemed incapable of throwing off the yoke which despotism had saddled upon them. When gunpowder attacks bigotry the walls begin to tremble. Enlightened management produced from Christian sources will supplant the labors of the Christian missionary, as it has already abolished largely child marriages, the suttee, the sacrifice of thousands at the grave of departed warriors or under the wheels of Juggernaut. It has broken the bonds of slavery wherever the armaments of lightning and thunder cut the foam and wake the echoes of distant lands. It is but a few years since the black man lifted up his arms in despair for Africa where now he is comparatively cheerful, happy and prosperous. We cannot fail to admire a discovery that brings life and liberty to thousands, while it abridges the happiness of few. Cobwebs grow in the shadows—they are evil things, like owls and bats, that disappear in the morning. They need not distort our vision in the sunshine and their filmy threads are too burdened with ghostly remains to invite lengthened interviews in the shade. The railway train is the opposite. In the distance it is a shadow, as it grows nearer the whirling wheels hold us in suspense till it passes. We should not forget it nor fail to inspect it carefully if we saw it in Egypt or Paradise.

We know, oh Gun! thou art black and rough and iron-hearted and unyielding, and thy voice may be boastful, but the issues are too great which thou art working out through human hands to cancel or conceal the mightiness of thy empire. Thou art getting nearer to our vision and uttering sublimer truths, beautifying human life as industry is rewarded and the fruits of thrift and enterprise are secured. The last child of a long race of patient ancestors who have fondly looked and waited to behold thy kingly brow. We salute you, oh gun! by past memories and the intense realization of future prophecies, when all equal things, in fact and in name, shall become equal, when armaments and equipments of war shall cease to be the playthings of princes and the resort of unconsecrated champions of tyranny wherever man is found. To every threatened breach of the decalogue it will eventually oppose itself and cry out, "Thou shalt not." It will create and preserve the forces which build up a healthy and enlightened conscience, dissipate lawlessness, the terror of the strong over the weak, confirm in all men the desire to do good and not evil, to see that all laws are wholesome, healthy and efficient, and establish beyond controversy every indisputable right to which man is born. When these are secured the humble and economic arts shall come in and prosper. We know with what great difficulties the discoveries of the world came in, and the rebuke which they met from those who should have been their ardent advocates. The compass, the arc, the potter's wheel, the movable types of Caxton and Guttenberg, when men had no light comparable to those of the present day, are instances. Now men stop and think, almost everything is possible which the human mind can conceive. The prophet of today reaches his tombstone tomorrow, for all eyes cannot endure the light which breaks in upon every zone of human knowledge.

Fifty years ago the Sage of Cragenputtoch delivered his message, "To do something, if it is the utmost you have in you, and do it in God's name." The boom of the cannon is to be the ministry of Jesus, the wash of its waves shall carry his salutation to all lands. The gun will do much, as it has done much in quiet places where the law is not needlessly invoked. It enters into the safety of homes; step by step it follows the individual who cannot rely upon brute strength. It is not the law, it does not make law, but it is and should be its agent. The man who works beside him who does not work without any protection soon becomes the victim. The gun, whether in public or otherwise, makes the wrongdoer hesitate with fear and where everybody may have the support of some kind of arms, it is seldom necessary to have any.

The gun is the one friend that cannot get old. It is on guard by night and by day, in heat or in cold. It may be in your arms or lie beside you, it holds in suspense or grapples with the outlaws of society, and when once arraigned follows them to their doom. To the pioneer it comes as the one comfort which is not denied him when all others fail. He takes his matchlock with a confidence that was never violated. With it he has met the hungry wolf and closed his jaws, and his own life has been often prolonged with the fruits of the chase. The gun has been a reformer. The evils which it has brought in are incomparable with those it has cast out. It has carried the prestige of a higher civilization where life was low and vitalized it with new vigor. It has opened the prisons, cut off the chains and drawn the trembling victims from fire and fagot, from the lash and the rack, and given them new ideas of virtue and new surprises of conscience where it was wasting in atrophy, and in the reformation of the body uncovered the jewel of the soul, creating the mental equipment anew so that it became clean, sweet and resourceful, inviting the better spirit to come to its temple and be welcome. It stands at the door in the hands of that grimy representative when the soldier enlists for service. It alone witnesses the kiss of wife, mother or lover. At the hour of his departure it sleeps by his side, in the vigils of the camp or on the battle-field, and is more familiar to him in emergency than knapsack or canteen. He may fall in strange lands and be rescued, or the sad pall may be made where he has fallen, and only the last look which science can recover from the grasp of death be obtained by her who was his all in all. Death will not steal him away without a last volley over his grave and a long silent farewell, and if we may follow him farther only from his having met his last enemy would keep him from calling for his arms.

POEMS

POEMS.

THE MYSTERY.

A COELO MYSTERIUM.

There's blood upon the moon, to blood the moon
Shall turn till some high priest in pity grown,
Seeing our sorrows as his own,
Has gathered all the nation's guilt
Of all the blood that e'er was spilt
From righteous Abel down.
So garments rolled in blood may be
The winding sheet of mystery
By which the soul climbs up to God.
In angel hands the martyrs breath
Bears him beyond the gates of death,
Wipes off the sweat which hotly rolled
To stay the plunderers of his soul,
And in the realms of light makes known
The kingdoms now become his own.
Singing the songs the angels taught,
Bringing the gifts the Magii brought,
Blending the service with the sense
Of myrrh and nard and frankincense.

Dear Heart, if ever thoughts precipitate
Accuse thy burden altogether great,
And tears flow down from thy weak eyes
Obsequious to the fading light,
The gilded dome shall clear thy sight.

There some fair orb o'ercasting all
May be the tears that you let fall,
And lamps of Heaven that never dim,
Blazing in pomp from rim to rim
Of that great balcony shall be
The Nation's hope and destiny.
Whilst still survive the blood and tears
That make the record of the years,
Each jewelled star in chorus sings,
The Cherubim lift up their wings,
Triumphant songs that never cease,
"Good will to men on Earth and Peace."

And oh, if some sweet Pleiades be near
To soothe and cheer a fainting mariner,
Let not Orion, that son of Mars,
Dispute the courses of the stars
And bring defeat like Sisera.
And should apostate fiends prepare
To wreck all we have lodged there
Of faith and hope in one sweet star,
They'd fall from Heaven like Lucifer.
So twinkling stars in mercy meek
Would beckon if they could not speak,
Till breaks the golden bowl to tell
To each the plentitude of Hell.
The saddest words, the most forlorn,
Spoken by man since Christ was born,
Wrecking the heart with anguish torn,
"His blood on us and our children."

In worlds of space, in darkness so profound
No eye could measure and no plummet sound,
Unnumbered systems rise to dawn
A moment brief and then are gone.
But never yet shall thy sweet ministry
Eclipsed be by any malady
Of earth or sky. Never a gale
That sweeps the sea or bends the sail,
Never the cyclone's fatal breath,
Nor cloud-racks hurried dance of death
Can smite the stars, nor tempest driven
Can drown the melody of Heaven.
Whilst he that runs as he that reads
May count his stars as nuns count beads,
Brightest and best that little gem
That led the way to Bethlehem
To see the King, and show to thee
The mystery of that red sea
Of blood. Wash and be clean.

BEYOND THE BLUE.

What seaport town is this,
  And whence so brave a crew
Sailing away for shores of bliss
  Never the land in view?
Many a year has come and gone
  Many a sea-bird south has flown
And ships have sailed and ships are due
That never came back beyond the blue.

All day long with song and shout,
  Many a ship went sailing out,
Along the track the dolphins flew
  The flying fish, the shrill sea-mew,
Burst o'er the bows in flying crowds;
  The stormy petrel sought the shrouds
Till night came on they never knew
  Whither they were beyond the blue.

Some few there were in passions power
  Frittered away the morning hour,
Heard siren songs or what is worse
  Floated away to isles of Circe,
Where beauty smiled, where music pealed,
  In eager haste they slipped the keel;
But sailing oft you hardly knew
  Whither they went beyond the blue.

Once on the ocean's outer rim,
  The sails were set, the masts were trim,
The sun a marvel to behold;
  Never withdrew its sea of gold;
But straining seas in every part
  Exhausted all the sailor's art,
Though sailing on you hardly knew
  Whither they went beyond the blue.

Caught in the dreadful undertow,
  The masts and sails were soon to go.
The fickle wind turned to a gale.
  The fog came down with rain and hail,

Great billows rose with every breath,
  And darkness led the dance of death;
And looking now full well I knew
  Whither they went beyond the blue.

Oh! ships that sail, oh ships that toss,
  Without a guide you may be lost,
Oh! sailors wheresoever cast
  It is to port ye come at last.
Nor ship, nor sail, nor dripping oar
  Nor wash of seas shall reach that shore.
Where all is peace, be this my due,
  The happy home beyond the blue.

UNSATISFIED.

I am a child of little thought;
My teachers are themselves untaught.
Caught in the dreadful undertow,
Whither my way how shall I know.
Falter or fail, the Great Author still
Unchanged must do his sov'reign will.

The eyes that see are dimmed and blurred,
The spirit tones are all unheard.
Could faintest voice from that far shore
Reach my dull ears I'd ask no more.

The purple plum
Is not so dumb,
The yellow peach

Yields to my reach,
And loving lips,
Like finger tips,
Are prone to meet I know
But oh, but oh, where shall I go
To find my friend become my foe?

The little nest that once had grown
So doubly dear is sad and lone.
And when I hear the dripping rain,
The rafters creak and cry with pain,
Some ghost I'm sure is writing there
In ghostly stains all my despair.
Till bended roof and strained wall
Fulfill the promise of their fall.
Only the swallow under the eaves
Neither his bosom frets nor grieves,
Whilst I am left nor peace nor rest
Slowly my sun sinks down the west.

FAIR AND FOUL.

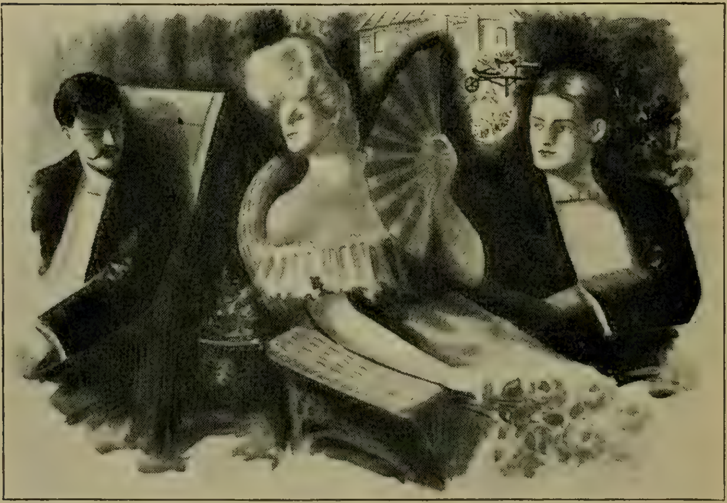
"Fair is foul and foul is fair
Hover through the fog and filthy air."
—MACBETH.

"If you would view fair Melrose right,
Go visit it by pale moonlight;
But many a ruined shapeless wall
Had better not be seen at all.
Many a wan and wasted dame

That fans her tallow dip to flame
Gives up as hostage for her pride
A long-drawn life of suicide.
And sad to see the withered sires
(Volcanoes that have drawn their fires)
Piping the songs they used to sing
When hope was borne on buoyant wing,
And sadder he whose tender cares
Encumbers all his modest prayers,
Sees the gray light go silvered down
On fringed lips that once were brown
And dimly feels the soft caress
Sink to a span and growing less.
For all is gone or going on
To silence and oblivion.

"The pouting lips, the breath that's warm
With summer fragrance and of morn,
The golden locks that rise on piles
Like bridges o'er some sunken wild—
These may allure, and often do,
As caves where winds go whistling through
And many a cheek on others may
To-morrow smile as you to-day
And leave behind (I will not lie)
But swarming droves of bacilli.
In law and physic you may test
The shortest way to be the best.
But blushing cheek will so undo it,
The longest way seems shortest to it.

"I saw a coquette once, and fair;
I knew her dainty cheek and hair,
The crinkle on her upturned nose,
Her swelling bust and pinched toes,
With many a soft and sunny curl
She might have stood against the world
As Cæsar did, whose very name
Had lit her footsteps with a flame.



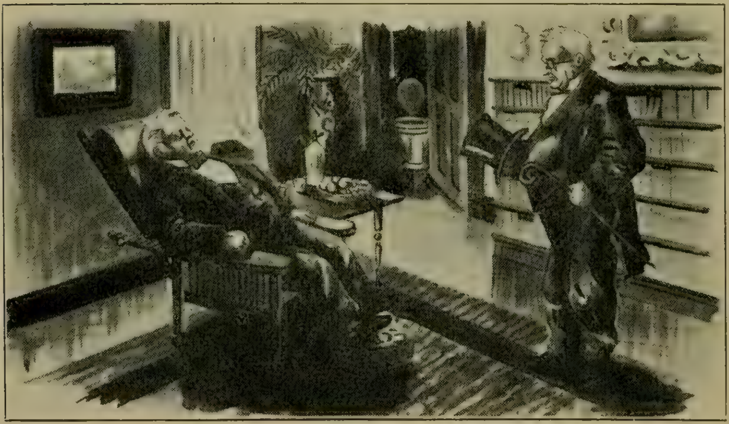
Out from her lips of honey-dew,
Rippled and rolled sweet nothings through;
Caroled and caroled like a bird,
The swee'st notes I ever heard,
And by her look which oft betrayed
Much more unspoken than was said,
With many a soft and silly wink
She bore me softly to the brink.

Her eyes so bright she raised her fan
To break the light—(I speak as man,
And never care at all to bellow)—
'Tis true she winked another fellow
And left me in the shade—the mouse—
When first I try to build a house
(Whoever heard; I never did before),
With fans, I'll deaden up the floor.

And I was lost had not a blonde
Lifted her baton as a wand
Sung out the hymn, "Pull for the Shore."
They pulled and pulled but eyed me more
With many a smile, but when the laugh
Opened its gates too wide by half,
"It's up to you," cried Leonore,
I could have sunk beneath the floor.
Without a shade upon my face,
Without a prayer to give me grace,
I answered true
(The shore in view)
Summer—is—o'er.

"I saw a man—I knew him well—
His feelings gave him such a spell
At every stage they rose to score him,
At every step were there before him.
His friends were few of every name,
And scarcer grew the more they came,
Had he but been a little jolly,

They soon had laughed him of his folly.
And oh, the roses might have grown
Where night-shade lingered all alone;
For pains like his would give a shock
To nerves elastic as a rock.
His belly like a punch-bowl grew,
He ate to kill a kangaroo.
Down from its seat degraded, lower'd,
His native wit fell overboard,
And none remained another day
Had not a doctor passed that way,



Observed the awful maw, and said
Nothing was left up in his head;
The gray matter gone, every nerve
On double duty had to serve,
Their elder brother that fed on grass
Some wild beast maybe, or an ass,

Whilst the great ducts so filled with steam
Shot poisoned vapors in a stream.
His pent up feelings must have vent,
And this is what the doctor meant;

Felt of his pulse and pulled his tongue,
Emptied the barrel by the bung.
Only a Seidlitz powder, please,
Could reach the seat of his disease,
And much surprised the idle brain
Welcomed its nerves safe back again.
And now whene'er his plaint begins
Of pains low down his abdomen,
So like a chicken thief he feels,
Quickly he takes unto his heels,
His adipose tissue falls away,
Rises aloft the crowning gray."

SATISFIED.

The man is born, but not the hour.
It waits until endued with power
        The victory sees.
Th' encircling sun is constant taught
To bring to light what man has sought
        Upon his knees.

To hear the music of the spheres,
Divinity must give you ears,
        Or toll the bell.

For all the promises that spring
May to the dove's returning wing
Be lost as well.

I know the key will fit the lock,
His grace will never mock
My being free,
And sin and death shall cease to mean
What to our ears has always been
Captivity.

If in His councils it shall be
That I shall sign my own decree,
It shall be just.
Nor aching heart nor throbbing breast
Shall bear a shadow that shall rest
On whom I trust.

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ERRATA.

Page 109 should read "Four propositions."

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